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ANNUAL REPORT

OF THE

SECRETARY OF INTERNAL AFFAIRS

OF THE

COMMONWEALTH OF PENNSYLVANIA.

PART III.

INDUSTRIAL STATISTICS.

VOL. XVIII.

1890.

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# REPORT

OF THE

## BUREAU OF INDUSTRIAL STATISTICS.

### COMMUNICATION.

DEPARTMENT OF INTERNAL AFFAIRS.

HARRISBURG, PA., *July 1, 1891.*

To His Excellency ROBERT E. PATTISON,

*Governor of the Commonwealth of Pennsylvania:*

SIR: In compliance with the requirements of the constitution, I have the honor to submit herewith, for transmission to the general assembly, the Eighteenth Annual Report of the Bureau of Industrial Statistics, the same being Part III of report of this Department, for the year ending November 30, 1890.

I am very respectfully,

Your obedient servant,

THOMAS J. STEWART,  
*Secretary of Internal Affairs.*

181907



LETTER OF TRANSMITTAL.

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HARRISBURG, *July 1, 1891.*

Honorable THOMAS J. STEWART, *Secretary of Internal Affairs of the Commonwealth of Pennsylvania:*

SIR: I have the honor to present herewith the Eighteenth Annual Report of the Bureau of Industrial Statistics.

The publication of the Report has been delayed to present the portion of the last national census covering the chief manufactures of Pennsylvania. I regret to state, however, that, notwithstanding every effort made to procure and publish these results in the present Report, not all of them have been obtained, and the uncertainty of the date of procuring the remainder has reluctantly led me to wait no longer for them. As soon as they are received and compared with the statistics of former years, they will be published separately. The work of tabulating all of the complete schedules or returns is finished; but the failure of a single manufacturer, in a given line of industry, to make returns prevents the completion of the tabulation of that industry, and also the presentation of this information in the present Report.

Yours very respectfully,

ALBERT S. BOLLES.  
*Chief of Bureau.*



## CHANGES IN FARM VALUES.

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### ADVANTAGES OF THE INTERCHANGE OF PRODUCTS.

Besides the results of the investigation into the causes which have affected the value of farming lands in this state, contained in the last Report, other results are now presented. Even these do not exhaust the subject, and several of the more important causes ascribed for the changes in their value have hardly been touched. If, however, this presentation shall have the effect of renewing the investigation on a broader plane, and with more ample means to obtain information, our purpose, in part at least, will be accomplished.

In the olden time every person made his own clothing, his own furniture, produced his own food, in short, so far as possible, gratified his wants by direct personal effort. By narrowing his employments his efficiency has been increased, and by exchanging his labor or the products of his labor with others, he has more things than he had before, and, by using and consuming these his comfort and happiness have been promoted.

This system of mutual dependence and interchange has a moral basis; it is grounded in confidence or faith in each other, and all are better who live under it than were those of an earlier time who lived in an isolated manner and by their sole personal exertion.

An illustration may be given to show how fully this dependence and interchange have been developed. Two years ago a fall of snow in New York city impeded transportation so seriously that it was quite impossible for several days to send milk, meats, vegetables and other necessities of life to that city. In that short period nearly the whole supply of food, except flour and a small quantity of salt provisions, was exhausted. So strong had grown the belief that the ordinary daily supplies would be forthcoming the people took no thought even for the morrow. This is the marvel of our modern civilization, our dependence on each other for the means of subsistence and other comforts, and the belief that they can be easily obtained.

There is another side to this interchange of products, or the division of labor, which is not so pleasant to contemplate. It so happens that



in many cases exchangers are trying to get too much for the things they sell and, of course, when they succeed, the other parties to such exchanges get less than they ought to receive. Whether this spirit or desire to obtain an undue advantage in exchange is increasing or otherwise is one of the greatest questions of our time and well worthy of inquiry.

A hundred years ago or more the employer of labor rarely had such difficulties with his employés as confront the modern employer of labor. It may be that the workingmen of those days as strongly believed that they were not receiving their fair share of the value of the product they produced as they believe to-day, but if so, their belief did not reveal itself in strikes or open ruptures with their employers. Either the employed better understand their importance in production, or they are more resolute in demanding their share than they were formerly. We are not considering here whether they receive more or less than their proper share or not, but are merely noting the fact that this question of the division of profits, arising from the joint undertaking of labor and capital, is exciting more attention than ever before.

Let us turn to the farmer. He leases or buys a farm, and also his utensils for working the land. He employs men to assist him in raising products, and after this is done then they must be transported to market and sold, first to the commission merchant, then to the retailer, and finally to the consumer. All of these classes, the seller of the agricultural implements and of the seed used by the farmer, the laborers employed by him, the transporters, the commission and retail merchants, may be regarded, from the point of view from which we are looking at the question, as engaged in the joint work of producing, transporting and selling products to the consumer. There are other persons, too, who furnish the farmer with his supplies for living during the interval of raising his products, but these, at present, may be left out of sight. The question may now be asked how is, or should, the price paid by the consumer for a bushel of wheat, for example, be divided between the several classes thus employed in producing and bringing it to him? What is a fair return to all concerned in the joint work already described, and, furthermore, it may be asked what are the motives or purposes of those who are engaged in this joint work? Is each class or person trying to get all he can regardless of the wishes, desires, and interests of the others, or is he seeking to get only his fair share of the price finally paid by the consumer. The farmers insist that the transporters are very serious hindrances to their prosperity; but are they getting more than their fair share for the service rendered by them? Cannot this charge be as justly brought against the seller of the agricultural implements, or the seed seller, or the laborers who are employed, or the commission, or retail merchants? Have the farmers looked at the question thus broadly? We are quite sure that too often they have looked at the remuneration paid to the transporter without much thought of the

amounts or shares the others were receiving. Some facts may be turned on this question, which we think are well deserving of serious study.

#### PRICES OF SEEDS AND LABOR.

Perhaps this inquiry should start with the prices paid for the seeds of various kinds used by the farmer. As, however, they are generally furnished by himself, and the prices correspond with the prices of the grains, potatoes, etc., which he sells, the table found elsewhere, of the prices obtained by him for all his products, will suffice.

We shall next consider the prices paid for labor. In the last report one hundred and eighty-three replies were given to this question. The rates have varied somewhat during the last ten years, but, in general, it may be said that the decrease has not been in proportion to that on farm products. A few answers may be repeated.

*Adams county.*—For general work, seventy-five cents per day with board, and in some special work, from one dollar to one dollar and twenty-five cents per day. By the month from eight to twenty dollars, according to the nature of the work. The wages have neither increased nor diminished in the past ten years.

*Allegheny.*—From one dollar to one dollar and fifty cents per day. The rate has diminished. One dollar per day with board. The wages have not diminished but have increased if anything, that is by the month.

*Armstrong.*—Twelve to fifteen dollars per month with board, and the rate has neither increased nor diminished in the above time. From seventy-five cents to a dollar and board. From one dollar and twenty-five to one dollar and seventy-five without board. Plain board is from ten to twenty dollars per month. The wages have declined fifty per cent. in the last ten years.

*Bradford.*—From twelve to eighteen dollars per month by the year. It has diminished very little.

*Butler.*—Fifteen dollars. The rate has diminished one-fourth in the last ten years.

*Bucks.*—One hundred and fifty to two hundred dollars and board by the year; by the day, one dollar. For haying and harvesting common labor two dollars per day, table board included. There has been no perceptible change in the last ten years.

*Blair.*—Sixteen dollars a month and boarding. Wages have increased probably four dollars per month in the last ten years.

*Bedford.*—Seventy-five cents per day and board, but in some districts fifty to sixty cents. These wages have not changed in the last ten years.

*Columbia.*—Seventy-five cents per day and board; wages have declined from ten to twenty-five cents per day, for ten hours labor, in the last ten years.

The rate is from twelve to fifteen dollars a month and board, washing and mending; day laborers seventy-five cents to a dollar per day, and this rate has changed very little in ten years.

Day hands seventy-five cents and a dollar per day and board. By the month fifteen dollars and board, and this rate has not materially changed in the last ten years.

From twelve to twenty dollars per month in the summer season, this includes board; the rates in winter are about thirty-three per cent. less. The rates have declined twenty per cent. in the last ten years.



From ten to twenty dollars per month with board and washing, and seventy-five cents to one dollar per day and board for day laborers. This has been about the rate for ten years.

Seventy-five cents to one dollar per day with board for farm laborers. Wages have increased from two to four dollars per month, and from ten to twenty-five cents per day in the last ten years.

From twelve to fifteen dollars per month and seventy-five cents per day, including board, and this rate has prevailed for the last ten years.

From seventy-five cents to one dollar per day. The wages have increased in the last ten years.

From twelve to sixteen dollars per month, or one dollar per day, for common farm labor. This rate has kept about the same as for ten years ago.

*Chester.*—From twelve to twenty-five dollars per month. The rates are the same since 1880.

Fifteen to eighteen dollars per month with board, and the rates are about the same for ten years.

Fifteen to twenty dollars per month with board. The wages have declined about ten per cent. in ten years.

An average of fifteen dollars per month with board. This has been the prevailing rate except for mechanics, whose wages have increased and the hours of labor been shortened in the last ten years.

From ten to twenty dollars per month. There has been an increase of about five dollars per month.

Fifteen to eighteen dollars per month with board. It has diminished about two dollars per month in the last ten years.

*Clearfield.*—One dollar and twenty-five cents per day. The wages have increased in the last ten years.

Twenty dollars per month of twenty-six days is about the average. The rate has diminished.

*Cumberland.*—Wages for ordinary work are from sixty-five to seventy-five cents per day. The rate has not varied any in ten years.

From fifty to seventy-five cents per day. It is less than it was ten years ago.

*Crawford.*—About sixteen dollars a month with board, or twenty-five and board themselves. I don't think they have diminished in the last ten years.

In summer from five to sixteen dollars per month with board; winter there is very little need for labor. The rate has diminished in ten years.

Of course, we are not criticising the remuneration now paid, for with this question, we have nothing to do. We are trying to find the reasons for the diminished prosperity of the farmer, and it must be obvious that if the prices of farm products have declined, and those paid for labor have not been correspondingly reduced, the profits of the farmer will be diminished, unless, indeed, he can purchase his agricultural implements, or his necessities of life, or his transportation at lower prices. On the other hand is not enough labor saved from the larger use of labor saving machinery to cover the increased price paid to labor in proportion to that obtained for products.

#### PRICES OF AGRICULTURAL IMPLEMENTS.

We shall now consider the prices paid for agricultural implements during the last ten years.



PRICES OF AGRICULTURAL IMPLEMENTS.\*

	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.
Single mowers. . . . .	\$130 00	\$125 00	\$115 00	\$110 00	\$105 00	\$100 00	\$90 00	\$85 00	\$80 00 to \$90 00	\$75 00 to \$90 00
Combined mowers and reapers, . . . . .	225 00	220 00	215 00	205 00	200 00	190 00	190 00	185 00	160 00	150 00
Single reapers. . . . .	.....	.....	.....	.....	.....	.....	150 00	145 00	140 00	130 00
Reaper and binder. . . . .	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
One-horse mowers, . . . . .	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Horse rakes, . . . . .	45 00	45 00	45 00	45 00	45 00	45 00	40 00	40 00	40 00	40 00
Hay tedders, . . . . .	75 00	75 00	75 00	75 00	70 00	70 00	70 00	65 00	65 00	65 00
Grain and fertilizing drills, . . . . .	140 00	140 00	140 00	140 00	140 00	130 00	130 00	130 00	130 00	120 00

\* There has been very little change in the price of the ordinary walking plow in the last twenty years, although there have been many improvements added to it. They can be purchased now about three dollars lower than twenty years ago. The tilling sulky plow is an invention of recent date, and is sold to a limited extent, but has not, nor is it likely, to come into general use in this state, as it is not well adapted to a rolling country. The price has declined from \$50 to \$35 since its invention. The ordinary field harrows have not varied much in price for twenty years past, but the spring-tooth harrow, an invention which was placed on the market about twelve years ago, is fast taking its place. The spring-tooth harrow has declined from \$25 to \$16 since its introduction. The walking cultivator was sold in 1870 from \$8 to \$10 apiece, there have been vast improvements made both in walking and riding cultivators during the past twenty years. The riding cultivators have declined from \$30 to \$28 during while at the present time the improved cultivators are retailed at from \$3 50 to \$6.00 apiece according to quality. The corn shellers worth \$22 in 1870 can now be purchased in an improved form at \$14. Farm rollers have not changed as much in price as they have in construction. Twenty years ago the log roller was in general use, but of later years they have been succeeded by the plank cylinder roller, in two sections, the price of which has declined from \$40 to \$25 since their introduction. It would be impossible to quote a price on log rollers as every farmer constructed his own. Unloading forks which were worth \$10 in 1870 can now be purchased for \$2, and corn shellers worth \$22 in 1870 can now be purchased in an improved form at \$14.

## PRICES OF AGRICULTURAL IMPLEMENTS—Continued.

	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.
Single mowers, . . . . .	\$75 00 to \$85 00	\$70 00 to \$75 00	\$70 00 to \$75 00	\$75 00	\$75 00	\$70 00	\$80 00	\$55 00	\$50 00	\$50 00	\$45 00 to \$50 00
Combined mowers and reapers, . . . . .	145 00	145 00	145 00	140 00	140 00	140 00	140 00	140 00	140 00	140 00	125 00 to 130 00
Single reapers, . . . . .	120 00	110 00	105 00	105 00	100 00	90 00	85 00	80 00	75 00	75 00	75 00
Reaper and binder, . . . . .	300 00	275 00	275 00	265 00	235 00	200 00	165 00	150 00	150 00	150 00	140 00 to 150 00
One-horse mowers, . . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	60 00	55 00	45 00	40 00	40 00	40 00
Horse rakes, . . . . .	40 00	35 00	35 00	35 00	32 00	32 00	32 00	30 00	25 00	25 00	22 50 to 25 00
Hay tedders, . . . . .	65 00	60 00	60 00	60 00	55 00	55 00	45 00	45 00	40 00	38 00	38 00
Grain and fertilizing drills, . . . . .	120 00	120 00	120 00	100 00	100 00	100 00	90 00	90 00	90 00	90 00	75 00 to 80 00
Shovels, . . . . .	75	70	70	66	65	60	56	55	51	50	50
Spades, . . . . .	60	60	60	53	50	46	45	45	45	41	40
Field rakes, . . . . .	25	25	25	25	25	25	25	25	25	25	25
Garden rakes, . . . . .	40	36	35	31	30	30	30	26	25	25	25
Hoes, . . . . .	50	50	50	43	40	40	40	40	40	40	40
Pitch forks, . . . . .	50	48	45	42	40	40	40	40	40	40	40
Manure forks, . . . . .	65	60	60	60	60	60	55	50	50	50	50
Seythes, . . . . .	75	75	75	60	60	60	60	60	55	50	50

## PRICES PAID FOR TRANSPORTATION.

We shall next inquire into the portion or share received by the transportation companies. It is maintained by the farmers that this is excessive. But are they exacting a larger share of the value of the products transported by them than they were ten years ago? Then, for example, the price of potatoes at Philadelphia was sixty-six cents per bushel, and the cost for transporting them from Erie was twelve cents per bushel, or a little less than eighteen and one-quarter per cent. of their value. In 1890 the Philadelphia price was seventy-seven cents per bushel and the cost of transportation from Erie was nine and three fifth cents per bushel, which was 12.46, or nearly twelve and one-half per cent. of their value. The railroad company, therefore, was not exacting so large a portion of their value by 5.72, or five three-quarters per cent. in 1890 as it was ten years before. In the way of further illustration the following table is presented of the average yearly price of wheat, corn, potatoes and butter in Philadelphia for ten years, the average yearly rates for transporting them for that period from various places to Philadelphia, and the percentage of the selling price of the product paid for transportation. These tables also show the difference in favor of, and against the shipper during this period, expressed in a percentage.

Perhaps the mode of determining these average prices ought to be stated. The price at which an article, wheat for example, is sold in Philadelphia at the beginning of January, April, July and October is ascertained, and the price given in the table is the average of the prices at the beginning of those months. Likewise, if more than one rate for transportation has prevailed during the year, the price given is the average rate based on all the different rates in force. A closer calculation was possible, as the percentage of the selling price of the product might have been ascertained on prices for weekly periods, while the transportation rate for so brief a period in most cases would have been an actual one, and no average at all. Nevertheless, the percentages here given are worked closely enough to answer the question proposed.

*Wheat.**Average yearly price of wheat at Philadelphia, cost of transportation thereto, and percentage of selling price paid for transportation.*

YEARS.	Average yearly price in Philadelphia.	Average yearly rate per bushel for transportation from Philadelphia to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.	Average yearly rate per bushel for transportation from Troy to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.	Average yearly rate per bushel for transportation from Chambersburg to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.
1880, . . . . .	1.26½	9½	7.28	. . . . .	. . . . .	9	7.11	. . . . .	. . . . .	8½	6.91	. . . . .	. . . . .
1881, . . . . .	1.27½	9	7	. . . . .	. . . . .	8½	7.07	. . . . .	.04	6½	5.01	. . . . .	1.90
1882, . . . . .	1.33½	7½	5.63	. . . . .	. . . . .	8	6	. . . . .	1.11	6½	4.09	. . . . .	2.82
1883, . . . . .	1.11½	7½	6.71	. . . . .	.04	8	7.15	. . . . .	. . . . .	6½	5.99	. . . . .	.92
1884, . . . . .	1.00	7½	7.05	. . . . .	.23	5½	5.75	. . . . .	1.36	6½	6.05	. . . . .	.86
1885, . . . . .	.91½	6	6.31	. . . . .	.97	5½	6.27	. . . . .	.84	6½	7.01	.10	. . . . .
1886, . . . . .	.86½	7½	8.64	1.36	. . . . .	5½	6.62	. . . . .	.49	6½	7.49	.58	. . . . .
1887, . . . . .	.86½	7½	8.63	1.35	. . . . .	5½	6.62	. . . . .	.49	6½	7.46	.55	. . . . .
1888, . . . . .	.94½	7½	9.72	2.44	. . . . .	5½	6.07	. . . . .	1.04	6½	6.84	. . . . .	.07
1889, . . . . .	.95½	7½	7.86	.58	. . . . .	5½	6.02	. . . . .	1.09	6½	6.81	. . . . .	.10
1890, . . . . .	.95	7½	7.89	.61	. . . . .	5½	6.05	. . . . .	1.06	6½	6.84	. . . . .	.07

*Wheat.*

YEARS.	Average yearly rate per bushel for transportation from Erie to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.	Average yearly rate per bushel for transportation from Bellefonte to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.	Average yearly rate per bushel for transportation from Lancaster to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.
1880, . . . . .	8 $\frac{1}{2}$	6.71	. . .	. . .	9	7.12	. . .	. . .	7 $\frac{1}{2}$	6.16	. . .	. . .
1881, . . . . .	9 $\frac{1}{2}$	7.39	.68	.44	8 $\frac{1}{2}$	6.68	. . .	1.01	7 $\frac{1}{2}$	6.14	. . .	.02
1882, . . . . .	7	5.03	. . .	2.09	7 $\frac{1}{2}$	5.03	. . .	1.27	7 $\frac{1}{2}$	5.85	. . .	.31
1883, . . . . .	7	6.26	. . .	1.06	7	6.02	. . .	1	6 $\frac{1}{10}$	5.63	. . .	.53
1884, . . . . .	7	7	.29	1.12	6	6	. . .	.84	6 $\frac{3}{10}$	6.30	.14	. . .
1885, . . . . .	10	10.92	4.21	1.11	5 $\frac{1}{2}$	6.01	. . .	.34	6 $\frac{3}{10}$	6.88	.62	. . .
1886, . . . . .	10	11.52	4.81	. . .	7	8.30	1.18	. . .	6 $\frac{1}{10}$	7.26	1.10	. . .
1887, . . . . .	7	8.06	1.35	. . .	7	8.06	.94	. . .	4 $\frac{1}{2}$	5.54	. . .	.62
1888, . . . . .	7	7.39	.68	. . .	7	7.39	.27	. . .	5 $\frac{1}{2}$	5.70	. . .	.46
1889, . . . . .	7	7.33	.62	. . .	7	7.33	.21	. . .	5 $\frac{1}{2}$	5.66	. . .	.50
1890, . . . . .	7	7.36	.65	. . .	7	7.36	.24	. . .	5 $\frac{1}{2}$	5.68	. . .	.48



*Corn.*

YEARS.

	Average yearly price in Philadelphia.	Average yearly rate per bushel for transportation from Chambersburg to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.	Average yearly rate per bushel for transportation from Lancaster to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.	Average yearly rate per bushel for transportation from Troy to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.
1880, . . . . .	55 94	7.84	13.40	. . . . .	. . . . .	7	12.60	. . . . .	. . . . .	8 $\frac{3}{4}$	15.01	. . . . .	. . . . .
1881, . . . . .	59 $\frac{1}{2}$	6.72	10.97	. . . . .	. . . . .	7	11.80	. . . . .	. . . . .	8 $\frac{1}{2}$	13.70	. . . . .	. . . . .
1882, . . . . .	77 $\frac{1}{2}$	6.72	8.41	. . . . .	. . . . .	7	9.03	. . . . .	. . . . .	6 $\frac{1}{4}$	8.74	. . . . .	. . . . .
1883, . . . . .	59 $\frac{1}{2}$	6.16	9.24	. . . . .	. . . . .	5 $\frac{1}{2}$	9.66	. . . . .	. . . . .	6 $\frac{1}{4}$	11.36	. . . . .	. . . . .
1884, . . . . .	59	6.16	9.32	. . . . .	. . . . .	5 $\frac{1}{2}$	9.74	. . . . .	. . . . .	5 $\frac{1}{2}$	9.32	. . . . .	. . . . .
1885, . . . . .	49 $\frac{1}{2}$	6.16	11.56	. . . . .	. . . . .	5 $\frac{1}{2}$	11.50	. . . . .	. . . . .	5 $\frac{1}{2}$	11.06	. . . . .	. . . . .
1886, . . . . .	44 $\frac{1}{2}$	6.16	11.35	. . . . .	. . . . .	5 $\frac{1}{2}$	12.92	. . . . .	. . . . .	5 $\frac{1}{2}$	12.33	. . . . .	. . . . .
1887, . . . . .	47.58	6.44	11.55	. . . . .	. . . . .	4 $\frac{1}{2}$	8.93	. . . . .	. . . . .	5 $\frac{1}{2}$	11.57	. . . . .	. . . . .
1888, . . . . .	57 $\frac{1}{2}$	6.44	9.35	. . . . .	. . . . .	4 $\frac{1}{2}$	8.38	. . . . .	. . . . .	5 $\frac{1}{2}$	9.50	. . . . .	. . . . .
1889, . . . . .	42.28	6.44	13.00	. . . . .	. . . . .	4 $\frac{1}{2}$	11.25	. . . . .	. . . . .	5 $\frac{1}{2}$	13	. . . . .	. . . . .
1890, . . . . .	43	6.44	14.98	. . . . .	. . . . .	4 $\frac{1}{2}$	11.04	. . . . .	. . . . .	5 $\frac{1}{2}$	12.79	. . . . .	. . . . .

Corn.

YEARS.	Average yearly rate per bushel for transportation from Pittsburgh to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.	Average yearly rate per bushel for transportation from Carlisle to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880.	Difference in favor of shipper since 1880, based on 1880 rates.	Average yearly rate per bushel for transportation from Bellefonte to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.	Average yearly rate per bushel for transportation from Erie to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.
1880, . . . . .	8½	14.76	. . .	. . .	7½	13.40	. . .	. . .	9	16.08	. . .	. . .	9	16.08	. . .	. . .
1881, . . . . .	8	13.50	. . .	1.26	6½	10.97	. . .	2.43	8½	13.92	. . .	2.16	10	16.87	.79	. . .
1882, . . . . .	6½	8.74	. . .	6.02	6½	8.38	. . .	5.02	7	9.06	. . .	7.02	7	9.06	. . .	7.02
1883, . . . . .	6½	11.34	. . .	3.42	6	10	. . .	3.40	7	11.76	. . .	4.32	7	11.76	. . .	4.32
1884, . . . . .	6½	11.44	. . .	3.32	6	10.01	. . .	3.39	7	11.88	. . .	4.20	7	11.86	. . .	4.22
1885, . . . . .	5½	11.96	. . .	2.80	5½	11.06	. . .	2.34	6	12.07	. . .	4.01	10	20.01	3.93	. . .
1886, . . . . .	6½	15.16	.40	. . .	6	13.48	.08	. . .	7	15.73	. . .	.35	7	22.47	6.39	. . .
1887, . . . . .	6½	14.46	. . .	.30	6	12.65	. . .	.75	7	14.73	. . .	1.35	7	14.72	. . .	1.36
1888, . . . . .	6½	11.67	. . .	3.09	6	10.37	. . .	3.03	7	12.10	. . .	3.98	7	12.10	. . .	3.98
1889, . . . . .	6½	15.96	1.20	. . .	6	14.18	.78	. . .	7	16.55	.47	. . .	7	16.55	.47	. . .
1890, . . . . .	6½	15.46	.70	. . .	6	13.95	.55	. . .	7	16.27	.19	. . .	7	16.27	.19	. . .

## Potatoes.

YEARS.	Average yearly price in Philadelphia.	Average yearly rate per bushel for transportation from Newport to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880 based on 1880 rates.	Difference in favor of shipper since 1880 based on 1880 rates.	Average yearly rate per bushel for transportation from Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference in favor of shipper since 1880 based on 1880 rates.	Average yearly rate per bushel for transportation from Erie to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880 based on 1880 rates.	Difference in favor of shipper since 1880 based on 1880 rates.	Average yearly rate per bushel for transportation from Troy to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880 based on 1880 rates.	Difference in favor of shipper since 1880 based on 1880 rates.
1880,	.66	12	18.18	. . .	. . .	12	18.18	. . .	12	18.18	. . .	. . .	10 <sup>1</sup> / <sub>2</sub>	15.15	. . .	. . .
1881,	.87 <sup>1</sup> / <sub>2</sub>	12 <sup>1</sup> / <sub>2</sub>	13.99	. . .	4.19	12 <sup>1</sup> / <sub>2</sub>	13.99	4.52	12	13.66	. . .	3.21	10	11.94	. . .	3.21
1882,	1.37 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>2</sub>	6.98	. . .	11.20	9 <sup>1</sup> / <sub>2</sub>	6.98	11.63	9	6.55	. . .	8.60	9	6.55	. . .	8.60
1883,	.83 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>2</sub>	11.46	. . .	6.72	9 <sup>1</sup> / <sub>2</sub>	11.46	6.72	9	10.75	. . .	4.40	9	10.75	. . .	4.40
1884,	.42 <sup>1</sup> / <sub>2</sub>	7 <sup>1</sup> / <sub>2</sub>	18.40	. . .	4.68	7 <sup>1</sup> / <sub>2</sub>	14.15	4.03	7 <sup>1</sup> / <sub>2</sub>	17.70	. . .	. . .	9	21.24	6.90	. . .
1885,	.57 <sup>1</sup> / <sub>2</sub>	7 <sup>1</sup> / <sub>2</sub>	13.50	. . .	4.68	7 <sup>1</sup> / <sub>2</sub>	13.50	4.68	13 <sup>1</sup> / <sub>2</sub>	23.37	5.19	. . .	9	15.57	.42	. . .
1886,	.66 <sup>1</sup> / <sub>2</sub>	7 <sup>1</sup> / <sub>2</sub>	11.75	. . .	6.43	7 <sup>1</sup> / <sub>2</sub>	11.75	6.43	13 <sup>1</sup> / <sub>2</sub>	20.40	2.22	. . .	9	13.56	. . .	1.59
1887,	.66 <sup>1</sup> / <sub>2</sub>	7 <sup>1</sup> / <sub>2</sub>	10.78	. . .	7.40	7 <sup>1</sup> / <sub>2</sub>	11.68	6.50	7 <sup>1</sup> / <sub>2</sub>	11.23	. . .	3.92	7 <sup>1</sup> / <sub>2</sub>	11.23	. . .	3.92
1888,	.84 <sup>1</sup> / <sub>2</sub>	8 <sup>1</sup> / <sub>2</sub>	9.98	. . .	8.20	8 <sup>1</sup> / <sub>2</sub>	11.41	6.77	9 <sup>1</sup> / <sub>2</sub>	11.41	. . .	4.46	9	10.69	. . .	4.46
1889,	.58 <sup>1</sup> / <sub>2</sub>	8 <sup>1</sup> / <sub>2</sub>	14.29	. . .	9.98	8 <sup>1</sup> / <sub>2</sub>	16.34	1.84	9 <sup>1</sup> / <sub>2</sub>	16.34	. . .	. . .	9	15.31	.16	. . .
1890,	.77	8 <sup>1</sup> / <sub>2</sub>	10.90	. . .	7.28	9 <sup>1</sup> / <sub>2</sub>	12.46	5.72	9 <sup>1</sup> / <sub>2</sub>	12.46	. . .	5.72	9	11.68	. . .	3.47



Potatoes.

YEARS.	Average yearly rate per bushel for transportation from Chambersburg to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.	Average yearly rate per bushel for transportation from Bellefonte to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.	Average yearly rate per bushel for transportation from Carlisle to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.	Average yearly rate per bushel for transportation from Lancaster to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.
1880, . . . . .	13½	20.45	. . .	. . .	12	11.04	. . .	. . .	11½	17.27	. . .	. . .	10½	15.82	. . .	. . .
1881, . . . . .	13½	15.36	5.09	2.61	12	13.65	2.61	. . .	11½	12.97	. . .	4.30	7½	8.54	. . .	7.28
1882, . . . . .	13	9.53	10.92	. . .	9½	6.91	. . .	4.13	11½	8.29	. . .	8.98	7½	5.45	. . .	10.37
1883, . . . . .	13	15.52	4.93	.42	9½	11.46	.42	. . .	11½	13.61	. . .	3.66	7½	8.95	. . .	6.87
1884, . . . . .	13	30.68	. . .	6.66	7½	17.70	6.66	. . .	11½	26.90	9.63	. . .	7½	16.52	.70	. . .
1885, . . . . .	13	22	1.35	1.92	7½	12.96	1.92	. . .	11½	19.74	2.47	. . .	7½	12.98	. . .	2.84
1886, . . . . .	13	19.58	.87	.26	7½	11.30	.26	. . .	10½	16.27	. . .	1	7½	11.30	. . .	4.52
1887, . . . . .	7½	11.23	9.22	.19	7½	11.23	.19	. . .	7½	10.78	. . .	6.49	5	7.49	. . .	8.33
1888, . . . . .	9½	11.41	9.04	.37	9½	11.41	.37	. . .	9	10.69	. . .	6.53	6	7.13	. . .	8.69
1889, . . . . .	9½	16.34	4.11	5.31	9½	16.35	5.31	. . .	9	15.31	. . .	1.96	6	10.21	. . .	5.61
1890, . . . . .	9½	12.46	7.99	1.42	9½	12.46	1.42	. . .	9	11.68	. . .	5.59	6	9.09	. . .	6.73

*Butter.*

YEARS.	Average yearly price in Philadelphia.	Average yearly rate per 100 pounds for transportation from Erie to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880 based on 1880 rates.	Difference in favor of shipper since 1880 based on 1880 rates.	Average yearly rate per 100 pounds for transportation from Troy to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880 based on 1880 rates.	Difference in favor of shipper since 1880 based on 1880 rates.	Average yearly rate per 100 pounds for transportation from Chambersburg to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880 based on 1880 rates.	Difference in favor of shipper since 1880 based on 1880 rates.
1880, . . . . .	28	39½	1.41	. . . . .	. . . . .	35	1.25	. . . . .	. . . . .	30	1.07	. . . . .	. . . . .
1881, . . . . .	28	39½	1.41	. . . . .	. . . . .	30	1.07	. . . . .	.18	30	1.07	. . . . .	. . . . .
1882, . . . . .	33½	40	1.20	. . . . .	.21	45	1.35	.10	. . . . .	32	.96	. . . . .	.11
1883, . . . . .	27½	40	1.44	.03	. . . . .	45	1.44	.19	. . . . .	32	1.15	.08	. . . . .
1884, . . . . .	30½	40	1.30	. . . . .	.11	30	.97	. . . . .	.28	32	1.04	. . . . .	.03
1885, . . . . .	28½	40	1.67	.26	. . . . .	40	1.67	.42	. . . . .	32	1.34	.27	. . . . .
1886, . . . . .	30½	40	1.32	. . . . .	.09	35	1.16	. . . . .	.09	32	1.06	. . . . .	.01
1887, . . . . .	28½	33	1.14	. . . . .	.27	30	1.04	. . . . .	.21	33	1.14	.07	. . . . .
1888, . . . . .	26½	33	1.25	. . . . .	.16	30	1.14	. . . . .	.11	33	1.25	.18	. . . . .
1889, . . . . .	27½	33	1.19	. . . . .	.22	30	1.08	. . . . .	.17	33	1.19	.12	. . . . .
1890, . . . . .	23	33	1.43	.02	. . . . .	30	1.31	.06	. . . . .	33	1.43	.36	. . . . .

*Butter.*

YEARS.	Average yearly rate per 100 pounds for transportation from Lancaster to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.	Average yearly rate for 100 pounds for transportation from Pittsburgh to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.	Average yearly rate per 100 pounds for transportation from Carlisle to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.
1880.	23	.82	..	..	39½	1.41	..	..	30	1.07	..	..
1881.	23	.82	..	..	39½	1.41	..	..	30	1.07	..	..
1882.	23	.69	..	.13	39½	1.19	..	..	32	.96	..	..
1883.	23	.84	.02	..	39½	1.42	.01	..	32	1.15	.08	..
1884.	23	.74	..	.08	39½	1.28	..	.13	32	1.04	..	.03
1885.	23	.96	.14	..	39½	1.65	.24	..	32	1.34	.24	..
1886.	23	.76	..	.05	39½	1.30	..	..	32	1.06	..	.01
1887.	17	.58	..	.24	33	1.14	..	.27	29	1.	..	.07
1888.	21	.79	..	.03	33	1.25	..	.16	29	1.10	.03	..
1889.	21	.76	..	.06	33	1.19	..	.22	29	1.05	..	.02
1890.	21	.91	.09	..	33	1.43	.02	..	29	1.26	.19	..

*Chickens.*

YEARS.	Average yearly price of product in Philadelphia.	Average yearly rate per 100 pounds for transportation from Erie to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.	Average yearly rate per 100 pounds for transportation from Carlisle to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.	Average yearly rate per 100 pounds for transportation from Chambersburg to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.	Average yearly rate per 100 pounds for transportation from Lancaster to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.
1880, . . . . .	11½	50½	4.29	. . . . .	. . . . .	30	2.55	. . . . .	. . . . .	30	2.55	. . . . .	. . . . .	23	1.95	. . . . .	. . . . .
1881, . . . . .	14½	50½	3.54	. . . . .	. . . . .	30	2.10	. . . . .	.45	30	2.10	. . . . .	. . . . .	23	1.61	. . . . .	.34
1882, . . . . .	16½	49	2.90	. . . . .	. . . . .	32	1.89	. . . . .	.66	32	1.89	. . . . .	.66	23	1.36	. . . . .	.59
1883, . . . . .	16½	49	3.04	. . . . .	. . . . .	32	1.98	. . . . .	.57	32	1.98	. . . . .	.57	23	1.42	. . . . .	.53
1884, . . . . .	15½	49	3.25	. . . . .	. . . . .	32	2.11	. . . . .	.44	32	2.11	. . . . .	.44	23	1.52	. . . . .	.43
1885, . . . . .	13½	49	3.59	. . . . .	. . . . .	32	2.35	. . . . .	.20	32	2.35	. . . . .	.20	23	1.68	. . . . .	.27
1886, . . . . .	12½	49	4.	. . . . .	. . . . .	32	2.61	.06	. . . . .	32	2.61	.06	. . . . .	23	1.87	. . . . .	.08
1887, . . . . .	16½	39	2.35	. . . . .	. . . . .	34	2.04	. . . . .	.51	39	2.35	. . . . .	.20	22	1.32	. . . . .	.63
1888, . . . . .	12½	39	3.10	. . . . .	. . . . .	34	2.70	.15	. . . . .	39	3.10	.55	. . . . .	27	2.14	. . . . .	.19
1889, . . . . .	13.07	39	2.98	. . . . .	. . . . .	34	2.60	.05	. . . . .	39	2.98	.43	. . . . .	27	2.06	. . . . .	.11
1890, . . . . .	13½	39	2.88	. . . . .	. . . . .	34	2.51	. . . . .	.04	39	2.88	.33	. . . . .	27	2.	. . . . .	.05

## Chickens—CONTINUED.

YEARS.	Average yearly rate per 100 pounds for transportation from Pittsburgh to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.	Average yearly rate per 100 pounds for transportation from Troy to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.	Average yearly rate per 100 pounds for transportation from Bellefonte to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.	Average yearly rate per 100 pounds for transportation from Newport to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.
1880.	50}	4.29	..	..	45	3.82	..	..	50}	4.29	..	..	39	3.32	..	..
1881.	50}	3.54	..	.67	45	3.15	..	.75	50}	3.54	..	.59	39	2.73	..	.59
1882.	50}	2.99	..	1.30	45	2.66	..	1.16	50}	2.99	..	1.30	39	2.31	..	1.01
1883.	49	3.04	..	1.25	37	2.29	..	1.53	49	3.04	..	1.25	39	2.42	..	.90
1884.	49	3.25	..	1.04	45	2.97	..	.85	49	3.25	..	1.04	39	2.58	..	.64
1885.	49	3.59	..	.70	45	3.29	..	.53	49	3.59	..	.70	39	2.86	..	.46
1886.	49	4.	..	.29	45	3.67	..	.15	49	4.	..	.29	39	3.18	..	.14
1887.	39	2.35	..	1.94	35	2.10	..	1.72	39	2.35	..	1.94	34	2.01	..	1.28
1888.	39	3.10	..	1.19	35	2.78	..	1.04	39	3.10	..	1.19	34	2.70	..	.62
1889.	39	2.98	..	1.31	35	2.67	..	1.15	39	2.98	..	1.31	34	2.60	..	.72
1890.	39	2.88	..	1.41	35	2.59	..	1.23	39	2.88	..	1.41	34	2.51	..	.81



## Oats.

YEARS.	Average yearly price of product in Philadelphia.	Average yearly rate per bushel for transportation from Erie to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.	Average yearly rate per bushel for transportation from Carlisle to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.	Average yearly rate per bushel for transportation from Chambersburg to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.	Average yearly rate per bushel for transportation from Lancaster to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.
1880.	43 $\frac{5}{8}$	5.12	11.71	...	...	4.48	10.25	...	...	4.48	10.25	...	...	4.16	9.51	...	...
1881.	42 $\frac{5}{8}$	5.76	13.51	1.80	...	3.84	9.01	...	1.24	3.84	9.01	...	1.24	4.16	9.75	.25	...
1882.	49 $\frac{1}{2}$	4.16	8.40	...	3.31	3.84	7.75	...	2.50	3.84	7.75	...	2.50	4.16	8.40	...	1.11
1883.	44.43	4.16	9.36	...	2.35	3.52	7.92	...	2.33	3.52	7.92	...	2.33	3.36	7.56	...	1.95
1884.	38 $\frac{3}{4}$	4.16	10.73	...	.98	3.52	9.08	...	1.17	3.52	9.08	...	1.17	3.36	8.67	...	.84
1885.	36 $\frac{1}{2}$	6.08	16.74	5.03	...	3.20	8.62	...	1.43	3.52	9.71	...	.54	3.36	9.26	...	.25
1886.	37 $\frac{1}{2}$	6.08	16.50	4.79	...	3.52	9.32	...	.93	3.52	9.32	...	.93	3.36	8.90	...	.61
1887.	37.18	4.16	11.18	...	.53	3.52	9.46	...	.73	3.68	9.89	...	.36	2.56	6.88	...	2.63
1888.	39 $\frac{1}{2}$	4.16	10.46	...	1.25	3.52	8.85	...	1.40	3.68	9.31	...	.94	2.88	7.24	...	2.27
1889.	31.58	4.16	13.17	1.46	...	3.52	11.14	.89	...	3.68	11.65	1.40	...	2.88	9.11	...	.40
1890.	34 $\frac{1}{2}$	4.16	12.05	.34	...	3.52	10.20	...	.05	3.68	10.66	.41	...	2.88	8.34	...	1.17

Oats—CONTINUED.

YEARS.	Average yearly rate per bushel for transportation from Pittsburgh to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.	Average yearly rate per bushel for transportation from Troy to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.	Average yearly rate per bushel for transportation from Bellefonte to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.	Average yearly rate per bushel for transportation from Newport to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.
1880.	5.12	11.71	. . . .	. . . .	4.80	10.98	. . . .	. . . .	5.12	11.71	. . . .	. . . .	5.12	11.71	. . . .	. . . .
1881.	4.96	11.64	. . . .	.07	4.55	10.67	. . . .	.31	4.96	11.64	. . . .	.07	4.96	11.64	. . . .	.07
1882.	4.16	8.40	. . . .	3.31	4.80	9.69	. . . .	1.29	4.16	8.40	. . . .	3.31	4.16	8.40	. . . .	3.31
1883.	4.16	9.36	. . . .	2.35	4.80	10.80	. . . .	.18	4.16	9.36	. . . .	2.35	4.16	9.36	. . . .	2.35
1884.	4.16	10.73	. . . .	.98	3.36	8.67	. . . .	2.31	3.52	9.08	. . . .	2.63	3.52	9.08	. . . .	2.63
1885.	3.20	8.82	. . . .	2.80	3.36	9.26	. . . .	1.72	3.20	8.82	. . . .	2.89	3.20	8.82	. . . .	2.89
1886.	4.16	11.02	. . . .	.69	3.36	8.90	. . . .	2.08	4.16	11.02	. . . .	.69	4.16	11.02	. . . .	.69
1887.	4.16	11.18	. . . .	.53	3.36	9.03	. . . .	1.95	4.16	11.18	. . . .	.53	3.84	10.32	. . . .	1.39
1888.	4.16	10.46	. . . .	1.25	3.36	8.45	. . . .	2.53	4.16	10.46	. . . .	1.25	3.84	9.66	. . . .	2.05
1889.	4.16	13.17	1.46	. . . .	3.36	10.64	. . . .	.34	4.16	13.17	1.46	. . . .	3.84	12.16	.45	. . . .
1890.	4.16	12.05	.34	. . . .	3.36	9.73	. . . .	1.25	4.16	12.05	.34	. . . .	3.84	11.12	. . . .	.59

*Cattle.*

YEARS.	Average yearly price of product in Philadelphia.	Average yearly rate per 100 pounds for transportation from Erie to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.	Average yearly rate per 100 pounds for transportation from Chambersburg to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.	Average yearly rate per 100 pounds for transportation from Lancaster to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.
1880, . . . . .	5.78	301	5.27	. . . . .	. . . . .	21	3.63	. . . . .	. . . . .	12	2.07	. . . . .	. . . . .
1881, . . . . .	6.72	151	2.31	. . . . .	.57	17	2.54	. . . . .	1.00	13	1.92	. . . . .	.15
1882, . . . . .	7 <sup>1</sup> / <sub>2</sub>	34	4.61	. . . . .	.81	17	2.30	. . . . .	1.33	13	1.76	. . . . .	.31
1883, . . . . .	7 <sup>1</sup> / <sub>2</sub>	34	4.83	. . . . .	.44	17	2.41	. . . . .	1.22	13	1.84	. . . . .	.23
1884, . . . . .	7 <sup>1</sup> / <sub>2</sub>	22	3.09	. . . . .	.73	17	2.38	. . . . .	1.25	13	1.82	. . . . .	.25
1885, . . . . .	6 <sup>1</sup> / <sub>2</sub>	22	3.48	. . . . .	.42	17	2.69	. . . . .	.94	13	2.06	. . . . .	.01
1886, . . . . .	5 <sup>1</sup> / <sub>2</sub>	151	2.69	. . . . .	.33	17	2.95	. . . . .	.68	13	2.26	. . . . .	.19
1887, . . . . .	5 <sup>1</sup> / <sub>2</sub>	151	2.81	. . . . .	.57	15	2.72	. . . . .	.91	09	1.63	. . . . .	.44
1888, . . . . .	5 <sup>1</sup> / <sub>2</sub>	13	2.26	. . . . .	.85	13	2.26	. . . . .	1.37	10	1.73	. . . . .	.34
1889, . . . . .	4 <sup>1</sup> / <sub>2</sub>	13	2.63	. . . . .	.48	13	2.63	. . . . .	1.	10	2.02	. . . . .	.05
1890, . . . . .	5 <sup>1</sup> / <sub>2</sub>	131	2.60	. . . . .	.61	13	2.50	. . . . .	1.13	10	1.92	. . . . .	.15



## Cattle—CONTINUED.

YEARS.	Average yearly rate per 100 pounds for transportation from Pittsburgh to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.	Average yearly rate per 100 pounds for transportation from Troy to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.	Average yearly rate per 100 pounds for transportation from Bellefonte to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.	Average yearly rate per 100 pounds for transportation from Newport to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.
1880, . . . . .	304	5.27	. . . . .	. . . . .	25	4.32	. . . . .	. . . . .	30½	5.27	. . . . .	. . . . .	21	3.63	. . . . .	. . . . .
1881, . . . . .	28	4.16	. . . . .	. . . . .	25	3.72	. . . . .	.60	28	4.16	. . . . .	1.11	21	3.12	. . . . .	.51
1882, . . . . .	28	3.79	. . . . .	1.48	20	2.71	. . . . .	1.61	28	3.79	. . . . .	1.48	21	2.84	. . . . .	.79
1883, . . . . .	28	3.98	. . . . .	1.29	20	2.84	. . . . .	1.38	28	3.98	. . . . .	1.29	21	2.98	. . . . .	.65
1884, . . . . .	28	3.93	. . . . .	1.34	15	2.10	. . . . .	2.22	28	3.93	. . . . .	1.34	21	2.94	. . . . .	.69
1885, . . . . .	10½	1.66	. . . . .	3.61	15	2.87	. . . . .	1.95	10½	1.66	. . . . .	3.61	18	2.85	. . . . .	.78
1886, . . . . .	15½	2.69	. . . . .	2.58	15	2.60	. . . . .	1.72	15½	2.69	. . . . .	2.58	15½	2.69	. . . . .	.94
1887, . . . . .	16	2.90	. . . . .	2.37	14	2.54	. . . . .	1.78	14	2.54	. . . . .	2.73	14	2.54	. . . . .	1.09
1888, . . . . .	15½	2.69	. . . . .	2.58	13	2.26	. . . . .	2.06	15½	2.69	. . . . .	2.58	14	2.60	. . . . .	1.03
1889, . . . . .	13½	2.73	. . . . .	2.54	13½	2.73	. . . . .	1.59	13½	2.73	. . . . .	2.54	13½	2.73	. . . . .	.90
1890, . . . . .	13½	2.60	. . . . .	2.67	13½	2.60	. . . . .	1.72	13½	2.60	. . . . .	2.67	13½	2.60	. . . . .	1.03

*Sheep.*

YEARS.	Average yearly price of product in Philadelphia.	Average yearly rate per 100 pounds for transportation from Erie to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.	Average yearly rate per 100 pounds for transportation from Carlisle to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.	Average yearly rate per 100 pounds for transportation from Chambersburg to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.	Average yearly rate per 100 pounds for transportation from Lancaster to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.
1880, . . . . .	5 $\frac{1}{2}$	33	5.86	. . . . .	. . . . .	18	3.19	. . . . .	. . . . .	21	3.73	. . . . .	. . . . .	13	2.30	. . . . .	. . . . .
1881, . . . . .	5.90	30 $\frac{1}{2}$	5.17	. . . . .	.63	17	2.88	. . . . .	.31	17	2.88	. . . . .	.85	13	2.20	. . . . .	.10
1882, . . . . .	5.90	34	5.76	. . . . .	.10	17	2.88	. . . . .	.31	17	2.88	. . . . .	.85	13	2.20	. . . . .	.10
1883, . . . . .	5.97	34	5.69	. . . . .	.17	17	2.84	. . . . .	.35	17	2.84	. . . . .	.89	13	2.17	. . . . .	.13
1884, . . . . .	5 $\frac{1}{2}$	28	5.09	. . . . .	.77	17	3.09	. . . . .	.10	17	3.09	. . . . .	.64	13	2.36	. . . . .	.06
1885, . . . . .	5.06	28	5.53	. . . . .	.33	17	3.36	.17	. . . . .	17	3.36	. . . . .	.37	13	2.56	. . . . .	.26
1886, . . . . .	5.44	23	4.22	. . . . .	1.64	16	2.94	. . . . .	.25	17	3.12	. . . . .	.61	13	2.38	. . . . .	.08
1887, . . . . .	5.28	20 $\frac{1}{2}$	3.90	. . . . .	1.96	18	3.59	.40	. . . . .	18	3.59	. . . . .	.14	14	2.65	. . . . .	.85
1888, . . . . .	5.60	16	2.86	. . . . .	3.	13	2.32	. . . . .	.87	13	2.32	. . . . .	1.41	16	2.86	. . . . .	.56
1889, . . . . .	5.28	16	3.02	. . . . .	2.84	15	2.84	. . . . .	.35	15	2.84	. . . . .	.89	16	3.02	. . . . .	.72
1890, . . . . .	5.94	16	2.69	. . . . .	3.17	15	2.52	. . . . .	.67	15	2.52	. . . . .	1.21	16	2.69	. . . . .	.39

Sheep—CONTINUED.

YEARS.	Bellefonte to Philadelphia.										Newport to Philadelphia.									
	Average yearly rate per 100 pounds for transportation from Pittsburg to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.	Average yearly rate per 100 pounds for transportation from Troy to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.	Average yearly rate per 100 pounds for transportation from Bellefonte to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.	Average yearly rate per 100 pounds for transportation from Newport to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.				
1880, . . . . .	33	5.86	. . . . .	. . . . .	25	4.44	. . . . .	. . . . .	33	5.86	. . . . .	. . . . .	21	3.73	. . . . .	. . . . .				
1881, . . . . .	30½	5.17	. . . . .	. . . . .	25	4.23	. . . . .	.21	30½	5.17	. . . . .	.69	21	3.55	. . . . .	.18				
1882, . . . . .	30½	5.17	. . . . .	. . . . .	20	3.38	. . . . .	1.06	30½	5.17	. . . . .	.69	21	3.55	. . . . .	.18				
1883, . . . . .	30½	5.10	. . . . .	. . . . .	20	3.35	. . . . .	1.09	30½	5.10	. . . . .	.78	21	3.51	. . . . .	.22				
1884, . . . . .	30½	5.18	. . . . .	. . . . .	15	2.72	. . . . .	1.72	30½	5.18	. . . . .	.68	21	3.81	. . . . .	.08				
1885, . . . . .	20½	4.05	. . . . .	. . . . .	15	2.96	. . . . .	1.48	20½	4.05	. . . . .	1.81	21	4.13	. . . . .	.40				
1886, . . . . .	23	4.22	. . . . .	. . . . .	15	2.75	. . . . .	1.69	23	4.22	. . . . .	1.64	21	3.86	. . . . .	.13				
1887, . . . . .	28	5.30	. . . . .	. . . . .	18½	3.50	. . . . .	.94	18½	3.50	. . . . .	2.36	20½	3.90	. . . . .	.17				
1888, . . . . .	20½	3.66	. . . . .	. . . . .	13	2.32	. . . . .	2.12	20½	3.66	. . . . .	2.20	20½	3.66	. . . . .	.07				
1889, . . . . .	16	3.02	. . . . .	. . . . .	15½	2.93	. . . . .	1.51	15½	2.93	. . . . .	2.93	16	3.02	. . . . .	.71				
1890, . . . . .	16	2.69	. . . . .	. . . . .	15½	2.61	. . . . .	1.83	15½	2.61	. . . . .	3.25	16	2.69	. . . . .	1.04				

*Cheese.*

YEARS.	Average yearly price of product in Philadelphia.	Average yearly rate per 100 pounds for transportation from Erie to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.	Average yearly rate per 100 pounds for transportation from Chambersburg to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.	Average yearly rate per 100 pounds for transportation from Lancaster to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.
1880, . . . . .	12.97	33	2.54	. . .	. . .	19	1.46	. . .	. . .	17	1.31	. . .	. . .
1881, . . . . .	12.69	33	2.60	.06	. . .	19	1.49	.03	. . .	14	1.16	. . .	.21
1882, . . . . .	13½	34	2.59	.05	. . .	19	1.44	. . .	.09	14	1.06	. . .	.25
1883, . . . . .	13.03	34	2.60	.06	. . .	19	1.45	. . .	.08	14	1.07	. . .	.24
1884, . . . . .	12½	34	2.72	.18	. . .	19	1.52	.06	. . .	14	1.12	. . .	.19
1885, . . . . .	10.47	34	3.24	.70	. . .	19	1.81	.35	. . .	14	1.33	.02	. . .
1886, . . . . .	10.53	34	3.22	.68	. . .	18	1.70	.24	. . .	14	1.32	.01	. . .
1887, . . . . .	12.47	28	2.24	. . .	.30	24	1.90	.44	. . .	14	1.12	. . .	.19
1888, . . . . .	10.97	28	2.55	.01	. . .	24	2.19	.73	. . .	16	1.46	.15	. . .
1889, . . . . .	10.84	28	2.58	.03	. . .	24	2.21	.75	. . .	16	1.47	.16	. . .
1890, . . . . .	10.25	28	2.73	.19	. . .	24	2.34	.88	. . .	16	1.56	.25	. . .

*Cheese—CONTINUED.*

YEARS.	Average yearly rate per 100 pounds for transportation from Pittsburgh to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.	Average yearly rate per 100 pounds for transportation from Bellefonte to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.	Average yearly rate per 100 pounds for transportation from Newport to Philadelphia.	Percentage of the selling price of the product paid for transportation.	Difference against shipper since 1880, based on 1880 rates.	Difference in favor of shipper since 1880, based on 1880 rates.
1880, . . . . .	33	2.54	. . . . .	. . . . .	33 $\frac{1}{2}$	2.61	. . . . .	. . . . .	27 $\frac{1}{2}$	2.12	. . . . .	. . . . .
1881, . . . . .	35	2.60	.06	. . . . .	35	2.75	.14	. . . . .	32	2.52	.40	. . . . .
1882, . . . . .	33	2.51	. . . . .	.03	15	1.14	. . . . .	1.47	32	2.43	.31	. . . . .
1883, . . . . .	33	2.54	. . . . .	. . . . .	15	1.15	. . . . .	1.46	32	2.45	.33	. . . . .
1884, . . . . .	33	2.64	.10	. . . . .	15	1.20	. . . . .	1.41	32	2.56	.44	. . . . .
1885, . . . . .	33	3.14	.60	. . . . .	25	2.38	. . . . .	.23	32	3.05	.93	. . . . .
1886, . . . . .	33	3.13	.59	. . . . .	25	2.37	. . . . .	.24	32	3.03	.91	. . . . .
1887, . . . . .	28	2.24	. . . . .	.30	25	2. . . . .	. . . . .	.61	23	1.84	. . . . .	.28
1888, . . . . .	28	2.55	.01	. . . . .	25	2.28	. . . . .	.33	23	2.09	. . . . .	.03
1889, . . . . .	28	2.58	.04	. . . . .	25	2.30	. . . . .	.31	23	2.12	. . . . .	. . . . .
1890, . . . . .	28	2.73	.19	. . . . .	25	2.44	. . . . .	.17	23	2.24	.12	. . . . .



PERCENTAGES OF THE SELLING PRICE OF PRODUCTS PAID FOR TRANSPORTATION.

*Wheat.*

YEARS.	Pittsburgh.	Troy.	Chambersburg.	Erle.	Bellefonte.	Carlisle.	Lancaster.
1880, . . . . .	7.28	7.11	6.91	6.71	7.12	6.90	6.16
1881, . . . . .	7	7.07	5.01	7.39	6.68	5.89	6.14
1882, . . . . .	5.63	6	4.09	5.03	5.03	5.63	5.85
1883, . . . . .	6.71	7.15	5.99	6.26	6.02	5.90	5.63
1884, . . . . .	7.05	5.75	6.05	7	6	6.06	6.30
1885, . . . . .	6.31	6.27	7.01	10.92	6.01	6.56	6.88
1886, . . . . .	8.64	6.62	7.49	11.52	8.30	7.60	7.26
1887, . . . . .	8.63	6.62	7.46	8.06	8.06	7.60	55.4
1888, . . . . .	9.72	6.07	6.84	7.39	9.39	6.97	5.70
1889, . . . . .	7.86	6.02	6.81	7.33	7.33	6.86	5.66
1890, . . . . .	7.89	6.05	6.84	7.36	7.36	6.94	5.68

*Corn.*

YEARS.	Pittsburgh.	Troy.	Chambersburg.	Erle.	Bellefonte.	Carlisle.	Lancaster.
1880, . . . . .	14.76	15.01	13.40	16.08	16.08	13.40	12.60
1881, . . . . .	13.50	13.70	10.97	16.87	13.92	10.97	11.80
1882, . . . . .	8.74	8.74	8.41	9.06	9.06	8.38	9.06
1883, . . . . .	11.34	11.36	9.24	11.76	11.76	10	9.66
1884, . . . . .	11.44	9.32	9.32	11.86	11.88	10.01	9.74
1885, . . . . .	11.96	11.06	11.56	20.01	12.07	11.06	11.50
1886, . . . . .	15.16	12.33	11.35	22.47	15.73	13.48	12.92
1887, . . . . .	14.46	11.57	11.55	14.72	14.73	12.65	8.93
1888, . . . . .	11.67	9.50	9.35	12.10	12.10	10.37	8.38
1889, . . . . .	15.96	13	13	16.55	16.55	14.18	11.25
1890, . . . . .	15.46	12.79	14.98	16.27	16.27	13.95	11.04

Potatoes.

YEARS.	Pittsburgh.	Troy.	Chambersburg.	Erle.	Bellefonte.	Carlisle.	Lancaster.
1880, . . . . .	18.18	15.15	20.45	18.18	11.04	17.27	15.82
1881, . . . . .	13.99	11.94	15.36	13.66	13.65	12.97	8.54
1882, . . . . .	6.98	6.55	9.53	6.55	6.91	8.29	5.45
1883, . . . . .	11.46	10.75	15.52	10.75	11.46	13.61	8.95
1884, . . . . .	14.15	21.24	30.68	17.70	17.70	26.90	16.52
1885, . . . . .	13.50	15.57	22	23.37	12.96	19.74	12.98
1886, . . . . .	11.75	13.56	19.58	20.40	11.30	16.27	11.30
1887, . . . . .	11.68	11.23	11.23	11.23	11.23	10.78	7.49
1888, . . . . .	11.41	10.69	11.41	11.41	11.41	10.69	7.13
1889, . . . . .	16.34	15.31	16.34	16.34	16.34	15.31	10.21
1890, . . . . .	12.46	11.68	12.46	12.46	12.46	11.68	9.09

Butter.

1880, . . . . .	1.41	1.25	1.07	1.41	1.41	1.07	.82
1881, . . . . .	1.41	1.07	1.07	1.41	1.41	1.07	.82
1882, . . . . .	1.19	1.35	.96	1.20	1.19	.96	.69
1883, . . . . .	1.42	1.44	1.15	1.44	1.42	1.15	.84
1884, . . . . .	1.28	.97	1.04	1.30	1.28	1.04	.74
1885, . . . . .	1.65	1.67	1.34	1.67	1.65	1.34	.96
1886, . . . . .	1.30	1.16	1.06	1.32	1.30	1.06	.76
1887, . . . . .	1.14	1.04	1.14	1.14	1.14	1	.58
1888, . . . . .	1.25	1.14	1.25	1.25	1.25	1.10	.79
1889, . . . . .	1.19	1.08	1.19	1.19	1.19	1.15	.76
1890, . . . . .	1.43	1.31	1.43	1.43	1.43	1.26	.91

*Percentages of the Selling Price of Products paid for Transportation.**Chickens.*

YEARS.	Erte.	Carlisle.	Chambersburg.	Lancaster.	Pittsburgh.	Troy.	Bellefonte.	Newport.
1880, . . . . .	4.29	2.55	2.55	1.95	4.29	3.82	4.29	3.32
1881, . . . . .	3.54	2.10	2.10	1.61	3.54	3.15	3.54	2.73
1882, . . . . .	2.90	1.89	1.89	1.36	2.99	2.66	2.99	2.31
1883, . . . . .	3.04	1.98	1.98	1.42	3.04	2.29	3.04	2.42
1884, . . . . .	3.25	2.11	2.11	1.52	3.25	2.97	3.25	2.58
1885, . . . . .	3.59	2.35	2.35	1.68	3.59	3.29	3.59	2.86
1886, . . . . .	4.	2.61	2.61	1.87	4	3.67	4	3.18
1887, . . . . .	2.35	2.04	2.35	1.32	2.35	2.10	2.35	2.04
1888, . . . . .	3.10	2.70	3.10	2.14	3.10	2.78	3.10	2.70
1889, . . . . .	2.98	2.60	2.98	2.06	2.98	2.67	2.98	2.60
1890, . . . . .	2.88	2.51	2.88	2.	2.88	2.59	2.88	2.51

*Oats.*

1880, . . . . .	11.71	10.25	10.25	9.51	11.71	10.98	11.71	11.71
1881, . . . . .	13.51	9.01	9.01	9.76	11.64	10.67	11.64	11.64
1882, . . . . .	8.40	7.75	7.75	8.40	8.40	9.69	8.40	8.40
1883, . . . . .	9.36	7.92	7.92	7.56	9.36	10.80	9.36	9.36
1884, . . . . .	10.73	9.08	9.08	8.67	10.73	8.67	9.08	9.08
1885, . . . . .	16.74	9.71	9.71	9.26	8.82	9.26	8.82	8.82
1886, . . . . .	16.50	9.32	9.32	8.90	11.02	8.90	11.02	11.02
1887, . . . . .	11.18	9.89	9.89	6.88	11.18	9.03	11.18	10.32
1888, . . . . .	10.46	9.31	9.31	7.24	10.46	8.45	10.46	9.66
1889, . . . . .	13.17	11.65	11.65	9.11	13.17	10.64	13.17	12.16
1890, . . . . .	12.05	10.20	10.66	8.34	12.05	9.73	12.05	11.12

*Cattle.*

1880, . . . . .	5.27	3.11	3.63	2.07	5.27	4.32	5.27	3.63
1881, . . . . .	2.31	2.54	2.54	1.92	4.16	3.72	4.16	3.12
1882, . . . . .	4.61	2.30	2.30	1.76	3.79	2.71	3.79	2.84
1883, . . . . .	4.83	2.41	2.41	1.84	3.98	2.84	3.98	2.98
1884, . . . . .	3.09	2.38	2.38	1.82	3.93	2.10	3.93	2.94
1885, . . . . .	3.48	2.69	2.69	2.06	1.66	2.37	1.65	2.85
1886, . . . . .	2.69	2.78	2.95	2.26	2.69	2.60	2.69	2.96
1887, . . . . .	2.81	2.54	2.72	1.63	2.90	2.54	2.54	2.54
1888, . . . . .	2.26	2.26	2.26	1.73	2.69	2.26	2.69	2.60
1889, . . . . .	2.63	2.63	2.63	2.02	2.73	2.73	2.73	2.73
1890, . . . . .	2.63	2.50	1.92	2.60	2.60	2.60	2.67	2.60



*Sheep.*

YEARS.	Erle.	Carlisle.	Chambersburg.	Lancaster.	Pittsburgh.	Troy.	Belleville.	Newport.
1880, . . . . .	5.86	3.19	3.73	2.30	5.86	4.44	5.86	3.73
1881, . . . . .	5.17	2.88	2.88	2.20	5.17	4.23	5.17	3.55
1882, . . . . .	5.76	2.88	2.88	2.20	5.17	3.38	5.17	3.55
1883, . . . . .	5.69	2.84	2.84	2.17	5.10	3.35	5.10	3.51
1884, . . . . .	5.09	3.09	3.09	2.36	5.18	2.72	5.18	3.81
1885, . . . . .	5.53	3.36	3.36	2.56	4.05	2.96	4.05	4.13
1886, . . . . .	4.22	2.94	3.12	2.38	4.22	2.75	4.22	3.86
1887, . . . . .	3.90	3.59	3.59	2.65	5.30	3.50	3.50	3.90
1888, . . . . .	2.86	2.32	2.32	2.86	3.66	2.32	3.66	3.66
1889, . . . . .	3.02	2.84	2.84	3.02	3.02	2.93	2.93	3.02
1890, . . . . .	2.69	2.52	2.52	2.69	2.69	2.61	2.61	2.69

*Cheese.*

1880, . . . . .	2.54	1.46	1.69	1.31	2.54	2.61	2.12	2.12
1881, . . . . .	2.60	1.49	1.73	1.10	2.60	2.75	2.60	2.52
1882, . . . . .	2.59	1.44	1.60	1.06	2.51	1.14	2.51	2.43
1883, . . . . .	2.60	1.45	1.61	1.07	2.54	1.15	2.54	2.45
1884, . . . . .	2.72	1.52	1.68	1.12	2.64	1.20	2.64	2.56
1885, . . . . .	3.24	1.81	2.01	1.33	3.14	2.38	3.14	3.05
1886, . . . . .	3.22	1.70	1.99	1.32	3.13	2.37	3.13	3.03
1887, . . . . .	2.24	1.90	2.24	1.12	2.24	2	2.24	1.84
1888, . . . . .	2.55	2.19	2.55	1.46	2.55	2.28	2.55	2.09
1889, . . . . .	2.85	2.21	2.58	1.47	2.58	2.30	2.58	2.12
1890, . . . . .	2.73	2.34	2.73	1.56	2.73	2.44	2.73	2.23

Do not these facts clearly show that while the prices of nearly all kinds of farm products have been falling during the last ten years in all parts of the state, the rates for transporting them have also been falling, and in even greater proportion. There are some exceptions. Thus, the rate for transporting wheat from Bellefonte to Philadelphia ten years ago was nine cents per bushel, which was 7.12 per cent. of its price at that time. In 1890 the rate for transporting it from Bellefonte was seven cents per bushel, or 7.36 per cent. of its price. The charge, therefore, by the transportation company for its service in transporting it was increased .24 or about one-quarter of one per cent. per bushel.

In general, however, these tables show that, notwithstanding the large diminution in the prices of farm products, the cost for transporting them to Philadelphia from the various places in the state has been correspondingly reduced; have the farmers, then, been unfairly treated by the transportation companies? If the low rates for which western produce has been carried has had the effect to reduce the price of it in the east, have not the transportation companies met this state of things fairly by making the reductions in the cost of transportation above described?

But it is contended that the transportation companies ought not to have carried western produce at the low rates which have been paid for the service, and that this policy has been alike injurious to themselves and to eastern producers. Admitting that this has been the effect of their policy, are the transportation companies to be blamed if they were powerless to regulate the rates? We have now reached the heart of this question. Who is responsible for the western rates?

The water transportation companies from Chicago, which operate by the way of the lakes and the Erie canal, and the Canadian railroads beyond our borders, have carried, for many years, at much lower rates than the trunk lines from Chicago eastward. As in every other case of competition the lowest competitor sets the prices, and therefore the rates from Chicago eastward have been determined as above explained. The four principal trunk lines in our country again and again have tried to establish higher rates from Chicago to the east, but have been prevented by their competitors. They have left nothing undone to protect the eastern farmer in order to protect themselves. They have realized, keenly enough, that the injury wrought to the farming industry in the east was not less serious to their own interests. Suppose they had refused to carry grain and other products from the west, what would have happened? Would they have been able to stop transportation and dictate terms? By no means. The inevitable effect ultimately would have been to transfer most of the freight to the water and Canadian transportation companies. No other policy was open to them, either they must take the freight at the rates fixed by the other companies or they must let it alone. They were powerless to protect either themselves or the eastern farmers by raising rates. Had they controlled the situation,

they would have been as ready doubtless to raise them for the purpose of increasing their profits as the eastern producers were desirous that this should be done in order to be protected from western competition.

The inability of the companies to protect either eastern producers or themselves has not been in the least improved by the interstate commerce law. The water routes having been exempted from its operation; they have been free to dictate rates and thus to destroy alike eastern railroads and farmers. Before its enactment the land transportation companies could unite in agreements concerning the rates and thus do some thing to check excessively low prices, but the interstate commerce law forbids such action and so the land transportation companies from the west and eastern producers have been left a prey to the water, and Canadian transportation companies.

The remedy for these things will be considered hereafter, but it is very evident that the interstate commerce law should include all competitive lines, and not simply those which happen to be operating on land or on water, for, by thus regulating the business of the land lines and not those on the water the law has aggravated some of the evils which formerly existed. The law should be broad enough to include all competitive lines, and should provide for the maintenance of rates that would be as fair for one section as for another.

It may be remarked that the eastern farmer did not complain of the rates paid years ago for transporting western produce to eastern markets for the reason that all were then prosperous. There was a market for everything produced, and at highly remunerative prices. But the heavy decline in prices has swept away all the profits, though, as we have seen, the railroads in the state have generally reduced the cost of transportation to a point corresponding with, or below, the diminished prices at which the farmers have sold their products. It is true that they have suffered from the more favorable rates given to the western shippers of produce, but these rates, as above explained, were made by the water transportation, and Canadian railroad companies and against the will of the other transportation companies.

It may be further remarked that the granting of an undue advantage to western farmers is not admitted by them. In no other section of the country have the railroads been assailed so severely or so many laws been passed unfavorable to their interests. The effect of such unfriendly legislation has been experienced in diminished dividends or bankruptcy. The railroads in the northwestern section of the Union,—the most important of all the grain sections,—paid a dividend in 1888 of  $\frac{5.2}{100}$  per cent. or about one-half of one per cent. In 1890 there were sixty-two railroads in Illinois, five of which led directly east from Chicago and were operated for only a short distance in the state. Of the remaining fifty-seven, nine only paid dividends in that year, and one of these, which extended out of the state, failed to earn fixed charges on its



lines in Illinois. The dividends paid in Illinois were eight per cent. on one line; six per cent. on one line; six per cent. on the common stock and seven per cent. on preferred stock on one line; five per cent. on three lines; four and one-half per cent. on one line; four per cent. on one line; five per cent. on the preferred stock of one line; and four per cent. on the common stock and five per cent. on the preferred stock of one line. The remainder, fifty-eight railroads, paid no dividends on their common or preferred stock. After deducting a large amount for fictitious capital in these railroads the returns on the amount actually invested must be very small.

If the western railroad companies, either through excessive competition or legislation have reduced their rates so low as to end in bankruptcy, or nearly so, ought the eastern farmers to complain because the eastern railroad companies have been unwilling to pursue such a course? Surely if the western farmers have been favored by rates too low, compared with the eastern farmers and against the will of the railroad companies, are not the eastern farmers, without reason, in ascribing the undue advantages obtained by their competitors, to the action of the eastern railroad companies? Rather, have not the western farmers and other shippers obtained them in spite of the eastern railroad companies and against their interests and their will?

But if the western farmers often are favored in rates, they encounter other disadvantages which are hardly less serious. A newspaper correspondent thus describes the evils of the elevator system on the Northern Pacific railroad:

“At every railroad station in North and South Dakota there are elevators controlled by corporations or firms, which, while acting independently at local grain centers, are in constant and sympathetic touch with each other at Duluth and Minneapolis. At these elevators the settler's wheat is graded and he must accept the result whether it be to his liking or not. There is also the ‘dockage’ system to be encountered. When wheat is delivered to the elevators a certain percentage on every bushel is deducted for dirt. This ranges from two to twenty pounds according to the condition of the wheat or the temper, disposition and honesty of the individual in charge of this part of the general system of grain delivery.”\*

Until all the advantages and disadvantages of the farmers in the east and west are known and compared, who can decide the question, whether those of one section are favored or not at the expense of the other.

One of the most serious evils disclosed by studying the tables showing the percentage of the cost of transportation to the price of the products transported, is the failure of the transportation companies to respond always to the diminished value of the produce of farmers at times when they could least afford to pay the rates demanded. Thus, it will

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\* Philadelphia Press.

be seen that the average yearly price of butter in Philadelphia in 1880 was twenty-eight cents per pound, and the rate for transporting it from Erie was thirty-nine and one-half cents per hundred pounds, which was 1.41 of the value of the product. In 1890 the average yearly price was twenty-three cents per pound, and though the rate of transportation had fallen to thirty-three cents per hundred pounds, the percentage of the cost of transportation to the value of the product was 1.43. Notwithstanding the large decline in the transportation rate the price of butter had declined still more, occasioned by the very large supply. Likewise when the price of wheat fell to seventy-six and one-half cents per bushel in Chicago in 1886 the rate for transporting it to the east was advanced from 13½ to 15 cents per bushel, and consequently the cost for transporting it was 19.37 per cent. of the product. The reason for not responding to the decline in the price was the lack of competition among the transporters; and this change in their conduct was in consequence of the quantity produced which was so large that all the transportation companies had quite enough to do. On the other hand, in 1882, when the wheat supply was small, the price arose to 1.18 per bushel, the rate for transporting it, under fierce competition, run down to fifteen cents per bushel, which was only 12.71 of its value. In other words, under the existing system when the farmer or other shipper can least afford to pay the same or higher rates, because of the low prices received for his products, he must nevertheless pay them, while at other times, when he can best afford to pay higher rates, they are not charged or are lower.

Though the railroad companies have reduced their rates so have they also reduced expenditures in many ways; while the farmers have not been equally successful in effecting a corresponding reduction in their expenditures. In the first place, the railroad companies have been able to make reductions by reason of the increase in traffic of merchandise and passengers. As a road-bed when completed can be utilized to its full capacity without greatly increased cost, in this respect the capital of a railroad company is better invested than that of the farmer. While he can increase perhaps the quantity produced by more careful tillage, or by raising more profitable products, he cannot overcome the loss occasioned by the decline in their value so easily as the railroad company can overcome the loss occasioned by the decline in rates by an contraction in expenditures. Furthermore, the transportation companies are keenly alive to the necessity of effecting every possible economy. Larger cars are made for carrying merchandise, the trains are longer, and more work is done by the locomotives, wages more closely correspond to the general decline in prices; lower rates are obtained on the money borrowed, in short, in every way possible they seek to lessen their expenditures and consequently are able to keep nearer to the old line of profits. The following extract from an article on American Rail-



ways and British Farmers, by a very competent authority is worth adding here: "In 1870, on the Pennsylvania railroad, the average number of tons hauled one mile by each locomotive was only  $2\frac{1}{10}$  millions, whereas in 1881 the average has increased to  $5\frac{1}{10}$  millions, being an increase of 143 per cent. On the same system each locomotive, in 1870, covered an average distance of 19,888 miles, whereas, in 1881, the average had increased to 29,297 miles, being an advance of 47 per cent. This movement, instead of being attended by a large bill for repairs, has actually been attended by a reduced expenditure under that head. Per one hundred miles run on the Pennsylvania railway, the average cost of repairs per locomotive fell from \$16.50 in 1865, and \$9.00 in 1870, to \$6.00 in 1881. If the same average fall of \$10.40 per one hundred miles had occurred on the railways of the United States generally the total extent of the economy realized on the 650 millions of train-miles run in 1888 would have been  $67\frac{1}{2}$  millions of dollars, as compared with the year 1865." \*

The farmers, in many cases at least, have not shown the same energy by engaging in other lines of production that would be likely to prove more remunerative; they have not lessened their expenditures to a degree corresponding with that of the railroad companies. On the other hand, notwithstanding the diminished prices in farm products, farmers are spending far more in personal ways than they spent formerly. This fact is known to all who have given even the smallest attention to the subject. They do not question this statement. They maintain, however, that they are just as much entitled to better living as others. No one, of course, will dispute this position, but in inquiring into the causes of their present condition, this fact must be clearly noted. It is very evident that if, ten years ago, they were denying themselves many of the things in which they indulge to-day, unless an income is derived from new sources, or higher prices are obtained from their products, a narrower margin of saving must be left as the result of their labors. This conclusion may be fortified by the fact that the farms which are sold to those who are willing to economize more, to satisfy fewer wants, to spend less money in personal ways, find no difficulty in avoiding debts and making satisfactory profits.

Nevertheless, the economies of transportation companies have not been sufficient to cover the reductions in rates. Accordingly the profits have fallen off greatly even of the best managed companies, as will be seen by examining the following table:

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\* J. S. Jeans, *American Railways and British Farmers*, Nineteenth Century, September, 1890.

STATEMENT SHOWING TONNAGE, MILEAGE, EARNINGS, EXPENSES, AND AVERAGES ON FREIGHT BUSINESS ON ALL RAILROADS EAST OF PITTSBURGH AND ERIE OPERATED BY THE PENNSYLVANIA RAILROAD COMPANY, FROM 1864 TO 1890 INCLUSIVE.

YEAR.	Tons.	Tons one mile.	Earnings.	Average earnings per ton per mile.	Expenses.	Average expenses per ton per mile.	Average net earnings per ton per mile.
				<i>Cents.</i>		<i>Cents.</i>	<i>Cents.</i>
1864, . . . .	3,189,259	436,591,940	\$10,907,036 77	2.498	\$8,336,168 69	1.909	0.589
1865, . . . .	3,090,681	452,183,478	12,277,490 68	2.715	10,610,867 32	2.347	0.368
1866, . . . .	4,001,455	579,839,073	13,453,592 72	2.320	10,625,075 12	1.832	0.488
1867, . . . .	4,501,232	646,231,881	13,464,201 69	2.083	9,974,596 36	1.544	0.539
1868, . . . .	5,518,729	806,376,652	14,983,779 28	1.858	9,712,567 62	1.204	0.654
1869, . . . .	6,294,066	927,714,156	15,439,739 81	1.664	10,602,820 27	1.143	0.521
1870, . . . .	7,041,688	1,014,652,970	15,252,314 99	1.503	9,971,625 98	0.983	0.520
1871, . . . .	8,404,334	1,244,328,216	16,852,662 82	1.354	10,777,144 98	0.866	0.488
1872, . . . .	13,246,456	1,629,613,645	23,797,237 02	1.460	16,181,517 88	0.993	0.467
1873, . . . .	15,647,509	1,870,537,537	26,987,820 76	1.443	18,286,725 39	0.978	0.465
1874, . . . .	15,604,922	1,916,591,690	24,715,418 15	1.290	15,554,659 70	0.812	0.478
1875, . . . .	15,772,722	2,026,190,425	22,807,660 00	1.126	14,362,136 16	0.709	0.417
1876, . . . .	17,064,953	2,221,739,198	21,132,560 23	0.551	14,657,083 29	0.660	0.291
1877, . . . .	16,382,268	2,086,659,438	21,149,389 38	1.014	12,834,226 82	0.615	0.399
1878, . . . .	17,597,447	2,368,330,428	21,961,447 75	0.927	12,752,696 07	0.538	0.388
1879, . . . .	22,867,162	2,974,925,881	24,500,960 21	0.824	14,287,532 62	0.480	0.344
1880, . . . .	26,051,091	3,239,482,799	29,750,291 99	0.918	17,490,054 88	0.540	0.378
1881, . . . .	30,895,376	3,631,829,468	31,128,521 00	0.857	18,773,389 24	0.517	0.340
1882, . . . .	34,181,016	3,911,845,087	34,205,596 31	0.874	21,685,852 22	0.554	0.320
1883, . . . .	35,684,662	4,059,970,201	35,764,506 82	0.881	22,807,493 84	0.562	0.319
1884, . . . .	36,632,571	4,134,657,237	33,242,301 60	0.804	21,399,835 67	0.518	0.286
1885, . . . .	39,481,385	4,446,470,651	30,895,747 98	0.695	20,435,253 72	0.460	0.235
1886, . . . .	42,833,499	4,584,355,908	34,623,877 39	0.755	22,566,369 73	0.492	0.263
1887, . . . .	50,033,297	5,214,900,569	38,080,823 85	0.730	25,912,845 49	0.497	0.233
1888, . . . .	55,708,046	5,796,816,928	40,175,773 83	0.693	27,944,386 20	0.482	0.211
1889, . . . .	58,373,489	6,170,513,980	42,302,176 16	0.686	29,182,838 01	0.473	0.213
1890, . . . .	66,648,730	6,994,332,633	45,783,597 23	0.655	33,404,558 91	0.463	0.192

This inquiry into the division of the profits or returns on the various products produced by the farmer suggests a remedy which will now be considered. The remedy suggested is that the return to the transportation companies should be based on the selling price of the products, varying as the price rose and fell. This is nothing more than an application of the sliding scale in determining wages to transportation. For several years in the iron trade the sliding scale has been in operation. The terms of remuneration are fixed once a year based on the selling prices of the various iron and steel products, and as these rise or fall in like manner does the remuneration received by the workmen

vary. This scale is regarded, on the whole, as a very satisfactory adjustment of the wage question. But why cannot it be applied to determine the rates which should be paid for transporting farm products as well as all others? When production was large prices would probably fall, and consequently the rates for transportation would decline, but as the quantity to be transported would be larger than at other times the aggregate returns would be maintained, and thus the transportation companies would not suffer. On the other hand, when production was light, prices would be higher, and so would be the prices for transportation, and these in turn would compensate for the decrease in the quantity transported. This principle, it will be recognized, is hardly anything more than one familiar to transportation companies, namely, the fixing of such a rate as the product will bear, the interpretation of which is, that on products yielding large profits a higher rate is asked than on products in which the profits to the producers or owner are small.

Suppose the rates for transportation on farm products were fixed by the interstate commerce commission, acting with the various railroad companies, as well as representatives of farmers and all other classes interested in transportation for their respective places. This, of course, would be a work of great magnitude, but it could be done. All admit the justice of fixing the same rate for a small quantity as for a large one, unless a distinction be made between car loads and smaller quantities. Then the only open problem among railroad companies would be to determine the quantity of freight which each should carry from a given place. There would be no longer any contention concerning the price for carrying it, this would be reduced simply and wholly to a controversy for the quantity. Having determined the rates that should be charged, it would be a comparatively easy matter, at all times, to determine what the farmer, or other transporter, should pay for services rendered by the transportation company. It is true that the work of determining the rates in the beginning could not be done in a day; a long period must be spent in making such adjustments, but when this work was done it would be essentially permanent.

Suppose, for example, that the rates for transporting wheat were based on the price of one dollar per bushel. Having fixed this price as the standard, then the work of the commission and the various parties interested, would be to determine the rates on that basis which should be fixed at all transporting points: then, as the price of wheat rose above or fell below this point so would the rates for transporting it vary. And the same principle would be applied in determining the rates for carrying every other commodity, while the operation of the principle in all these cases would be the same. Of course, the rates would not be determined by the daily prices of products, but by the average prices extending over a considerable period, two or three months or longer.

In the way of strengthening our suggestion we may add, that com-



commission merchants for a long period, perhaps always, have been remunerated in this manner. Their remuneration consists of a percentage of the price received on the goods consigned to, and sold by them. Those, for example, who have sold woolen goods have usually charged one per cent. on their sales, and a half of one per cent. more for guaranteeing or securing their customers against loss. Whenever the price of goods advanced, of course, the receipts of the commission merchants were larger and their profits were correspondingly increased; and this was obviously just, for if the consignor made larger profits he ought to share them with those who marketed his goods for him. On the other hand, if the price of the goods fell, the receipts declined, and the profits accruing to the commission merchants were smaller. This was obviously just, for if the consignor's or producer's profits were less, those of the commission merchants ought also to be smaller. This principle or method of remunerating a commission merchant for his service is evidently so fair that no one has ever thought of changing it. How does the present mode of remunerating transporters operate? It is true that when there is a considerable advance or decline in products that continues long, the rates for transportation also change, but the fluctuations are by no means uniform. The result is that some of the parties, either the farmers at one end of the line, or the purchasers from the farmers at the other, gain or lose by these fluctuations. If, for example, the market for wheat showed rise after a purchaser of wheat has made his purchase, and before the rates of transportation have been advanced, he would be the gainer by the event. If, on the other hand, the market should decline after making his purchase and before the rates of transportation have changed, he would be the loser, and thus it happens that gains and losses are accruing to the purchasers of wheat from the uncertainty of the market, and from inelasticity in the rates of transportation. It will be readily seen that if the rates were based on the prices of the commodities sold that all danger of gain or loss would pass away. Thus the entire process of doing business would be attended with more security to all concerned.

This is only an outline of a remedy, but we think it is well worthy of consideration. It will not be questioned that such an arrangement of rates would be the work of much time and difficulty, but when once adopted would harmonize the interests of the farmers and other owners of products and the railroad companies. Indeed, it would settle the transportation question, so called, forever in future production and exchange.

The same principle of adjustment might even be employed to determine the prices of agricultural implements, as well as the remuneration paid for labor. A man might be employed for a given sum per day, month or year, and in addition thereto might receive a sum determined by the prices obtained from the results of his labor at the end of the working period. This was the mode of remunerating sailors when

engaged in the whale fisheries; they were sharers or partners in the joint enterprise. Why could it not be applied to the remuneration of farm laborers as well? It has been applied by manufacturers and merchants and is gaining ground? It might be extended in the same manner to those who furnish agricultural implements and other products needed by the farmer. A fixed sum might be paid for them and an additional sum determined by the prices obtained from the produce of the land. It will be said that such a system would operate unfairly; that the intelligent and economical farmer would acquire larger profits than the wasteful one, and, therefore, would have more to divide. This, of course, is true; but, on the other hand, those who furnished implements or those who labored for others would learn who the economical and intelligent farmers were and would shun the others. Thus the system would put a premium on honest and intelligent husbandry, and a penalty on the dishonest and slothful.

That the question is a very grave one, both to the shipper and to the transporter, will not be denied. The most general policy has been to give the transportation companies great freedom of action; in some cases their freedom has been restricted by legislative action. Neither policy is free from evils. The eastern farmers have an obvious advantage in transportation by shorter distances over their western competitors. Shall a transportation company be permitted to neutralize this advantage by making lower rates to the more remote shippers? If not permitted to overcome the natural disadvantages that may exist in a place or section for farming or other business, it may never be attempted. On the other hand, if the justice of doing this be admitted, then a transportation company may inflict a series of evils on the farming or business done in other places. Again, if such a policy of equalization be right it follows that a transportation company must be alert, and adjust rates to overcome the differences that will constantly arise between the varying advantages of producers and shippers. Since the work of a transportation company in equalizing the advantages of its customers, by an adjustment of rates is so difficult, and any attempt to do so is likely to bring forth many evils, may it not wisely hesitate to engage in the task? In view of the evils which have arisen, should not a different method, like the one suggested, or some other, be adopted and fairly tried?

The eastern farmer should always remember that far more villages, cities and other local markets are near to him at which he can sell his produce, without employing the transportation companies at all, than surround the western farmer. The cities and villages in a far western state are few compared with those in Pennsylvania; consequently the western farmer must depend largely on the eastern markets and of course on transportation companies for the transportation and sale of his produce. The Pennsylvania farmer, to no inconsiderable extent, remains quite independent of the transportation companies and of markets out-



side the commonwealth. The cost of transportation is completely obliterated in many cases. The effects of this is seen in the advance in the value of lands in many parts of the state. Indiana county might serve as an illustration. Not many years ago farming lands in that county were among the least valuable in the state, because there were no local markets, but coal was discovered in many parts of the county and forthwith coal mining began. This industry at once created villages which formed excellent local markets for the farmers, the consequence is that farming of late years has been more profitable than it was formerly, and the proof of this is the increased value in the farming lands in that section.

#### WHOLESALE PRICES.

The next series of tables represent the prices obtained by the farmers for their products at various places in the state. These tables were published in the last Report and are reproduced at the end of this.

#### CONSUMERS' PRICES.

The final tables which represent the prices paid by the consumer to the retailer, will be given when considering the farmer's cost of living.

From this series of tables, containing the prices obtained by all the more important classes who are engaged in producing farm products and bringing them to the consumer, it appears that no class is getting a larger portion or share of the final price than formerly. Doubtless this is not true in every case, but it is in the most of them.

#### THE PROFITS OF PACKING HOUSES.

One of the most noteworthy exceptions, in the popular judgment, is that of the packers and slaughterers. A few years ago the cattle growers obtained much higher prices for their cattle than they are getting now. Much has been said concerning the cause of the decline, but the following explanation by Mr. Philip D. Armour, contained in his testimony before a committee of congress that investigated the subject, is very interesting and worth giving, notwithstanding the source from which it comes.

"In my opinion, the leading cause of the decline in cattle values is the over-production and over-marketing of cattle, especially of that grade of cattle known as range or southwestern cattle. The over-marketing of cattle has been brought about by the reckless investment and speculation in ranch properties, which placed a fictitious value upon cattle and resulted eventually in the withdrawal of money so invested, thus compelling many engaged in the business to prematurely market their cattle to realize on them. Other causes have contributed to bring about the depreciation in the values of cattle. The low price of hides, caused largely by the immense free importation of foreign hides, national and state legislation against oleomargarine, which not only taxed the article, but by reason of the restrictive and prohibitory features of such legislation largely decreased its manufacture, quarantine laws and regulations,

which have discredited, at home and abroad, the healthfulness of our cattle and beef products, and has been seized upon by foreign countries as an excuse for attempted prohibitory legislation and for agitating, through the press and otherwise, their exclusion from foreign markets. The competition which has grown up within two or three years in the vast cattle-raising region of South America, Australia and New Zealand, has also aided to depress the price of range cattle, and all the products from these cattle. These causes have also aided to depress the price of what is known as native cattle—that is to say, cattle from such states as Illinois, Iowa, Kansas, Missouri and Nebraska. The depreciation, however, in such cattle has not been so marked. The farmers and feeders of cattle on the high-priced lands of these states have been forced into competition with the growers of cattle on the cheap lands of the west and southwest. In many cases they have been forced to raise and feed their cattle on their high-priced lands with expensive feed and care, and put them in the market in competition with the cattle raised on the public domain, which are only grass-fed, and have received little or no care. The extension of railways in all directions into the range countries, and the improved methods of transporting cattle, have brought the grazing grounds and the great cattle markets so close together in time that the feeders and raisers of cattle in the states named have no longer the advantage which distance formerly gave them. The changes brought about in the last fifteen years in cattle feeding, not only in this country but elsewhere, have, of necessity, compelled a change in the manner of marketing cattle and preparing the products of cattle for consumption, as well as in the distribution and sale of such products. As an evidence of this, it is only necessary to call attention to the centralization of markets; to the changes in the equipment for the transportation of cattle for long distances; to the refrigerator car system, by which fresh beef can be transported for long distances and ripen and improve during transit; to the exportation of cattle, fresh beef and beef products to foreign countries, and to the transportation of fresh beef and mutton from Australia across the tropics, and the marketing of it in good condition in England. It is apparent that to understand and intelligently discuss the present conditions of raising and marketing cattle, and the products of cattle, different rules must be applied than would have been in the same sort of an investigation fifteen years ago. To market the vast herds of cattle raised on what used to be called the plains of the west and southwest, to slaughter the same and prepare every part of the animal for the market in which the consumer buys in the thickly populated parts of this country and in Europe, is a very different problem than when the raiser of cattle sent his drove on foot to a near market, where it was distributed among small buyers. To pay to the raiser of such cattle a price which will leave him anything after paying the expense of raising and marketing them, it is necessary that the greatest possible economy shall be used by the slaughterer, and that no particle of the animal shall be allowed to go to waste, if he hopes to put the products on the market of the consumer at such a price as will bring him customers.

The prices for all portions of the bullock, except those for the fancy cuts of prime beef to consumers, have declined in an equal degree with the decline in the price of the live animal, as an investigation of the prices of the different products of beef for a number of years will clearly show.

Hides have steadily declined in value since 1886, and prior to that

time. The figures to-day show loss upon every hide of from \$1.25 to \$1.60. During the last five years, imports of foreign hides have amounted to over four million hides a year, and the class of foreign hides which more directly compete with our salted hides here, viz : Montevideo and Buenos Ayres, have declined in price from 25 cents per pound to  $14\frac{3}{4}$  and 15 cents. This decline in the price of these hides, together with their large importation, has undoubtedly had a depressing effect upon the American hide market.

The facts and figures given below I have obtained from the *Shoe and Leather Reporter*, an acknowledged authority upon this subject :

	Texas steers.	Native steers.
Average cost of hides 1886, . . . . .	10 $\frac{1}{2}$ cents.	10 $\frac{1}{4}$ cents.
Average cost of hides 1887, . . . . .	9 $\frac{1}{2}$ cents.	9 $\frac{3}{4}$ cents.
Average cost of hides 1888, . . . . .	8 $\frac{1}{3}$ cents.	9 cents.

	<i>All kinds of cattle.</i>
Average hide values, 1870, . . . . .	\$6 00
Average hide values, 1880, . . . . .	5 50
Average hide values, 1885, . . . . .	5 00
Average hide values, 1888, . . . . .	4 50

These figures (official) show the value of imported hides for five years. From reports Secretary of the Treasury :

1885, . . . . .	\$16,389,067
1886, . . . . .	21,049,320
1887, . . . . .	18,370,973
1888, . . . . .	17,569,928
1889, . . . . .	17,459,278
Total, . . . . .	<u>\$90,838,566</u>

The following figures are the prices of tallow in barrels in New York city for five years, and indicate a loss fully 60 cents per steer from this source :

1883, average price per pound, . . . . .	8 cents.
1884, average price per pound, . . . . .	7 cents.
1885, average price per pound, . . . . .	5 $\frac{3}{4}$ cents.
1886, average price per pound, . . . . .	4 $\frac{1}{2}$ cents.
1887, average price per pound, . . . . .	4 $\frac{1}{8}$ cents.

The prices obtained for oleo oil in Holland show even a greater decline, as the following figures for first quality oil in the Rotterdam market for years 1883 and 1888, respectively, will show. Figured from Hartog's and Lieb's circulars :

First quality oil, Rotterdam, 1883, . . . . .	82 florins per 100 kilos.
Nets in Chicago, . . . . .	13 $\frac{1}{2}$ cents per pound.
First quality oil, Rotterdam, 1888, . . . . .	54 florins per 100 kilos.
Nets in Chicago, . . . . .	8 $\frac{1}{2}$ cents per pound.

These are average prices figured from weekly sales for entire year.



The following figures show the exports of Oleo oil for five years. From Hartog's circulars and estimating amount shipped to Scotland and Germany:

1884, . . . . .	40,000,000
1885, . . . . .	45,000,000
1886, . . . . .	47,250,000
1887, . . . . .	60,120,000
1888, . . . . .	59,679,120
Total, . . . . .	<u>252,049,120</u>

Nevertheless, the profits of Armour & Co., of which Mr. Armour is a member, for 1888, were \$418,104.40. How was this possible? Simply by transacting an enormous business. The number of cattle slaughtered was 340,649, and the profits were, therefore, only \$1.22 per head, which indeed seemed reasonable. Below will be found a table showing the details of the business more fully.

ABSTRACT FROM THE BOOKS OF ARMOUR & CO., SHOWING RESULTS OF  
340,649 CATTLE SLAUGHTERED AND MARKETING DURING 1888.

	Number.	Weight.	Average weight.	Average cost.	Avg. beef yield.	Total cost.
Live, . . .	340,649	389,702,456	1,144	\$3,94 <sup>85</sup> / <sub>100</sub>		
Dressed, .	340,649	213,401,065	626		54.76	\$15,387,401
Labor, salaries, material, rent, fuel and refrigeration, . . . . .						596,136
Total, . . . . .						<u>\$15,983,537</u>

*Credit.*

Cheekmeats, hearts, livers, tongues, sweetbreads (prices averaged), 340,649 head, at 70 cents, . . . . .	\$238,451 30
Raw fat, 17,890,425 pounds, at 5 <sup>1</sup> / <sub>4</sub> cents, . . . . .	939,247 31
Regular tallow, 3,521,975 pounds, at 4 <sup>1</sup> / <sub>2</sub> cents, . . . . .	158,488 88
Blood and fertilizer, guts, horns, weasands, bladders, tallow and switches, at 61 cents per head, . . . . .	207,795 89
Hides, 22,440,851 pounds, at 8 <sup>3</sup> / <sub>8</sub> cents, . . . . .	1,879,924 61
Total, . . . . .	<u>\$3,423,907 99</u>
Total cost, . . . . .	\$15,983,537 23
Total credit, . . . . .	3,423,967 99
213,401,065 pounds, beef cost \$5.89 per cwt., . . . . .	<u>\$12,559,629 24</u>
Net proceeds from sale of 213,401,065 pounds dressed beef, freight and selling expenses deducted, . . . . .	\$13,085,733 64
Less 10 per cent. depreciation on auxiliary houses, . . . . .	\$70,000 00
Bad debts, . . . . .	38,000 00
	<u>108,000 00</u>
Balance, . . . . .	\$12,977,733 64
Less cost of beef, . . . . .	<u>12,559,629 24</u>
Aggregate profit on 340,649 cattle, . . . . .	<u>418,104 40</u>
Average profit per head, . . . . .	<u>1 22</u>

Mr. Armour contended that \$1.22 per head was not an excessive compensation for the labor and business risks of killing 340,649 cattle and distributing 213,401,065 pounds of human food.

If his statement be accepted as correct, it must be believed that the packers have not intercepted or retained the difference between the present and former prices paid to the cattle growers, and that the consumers have had the full benefit of the decline. It appears, furthermore, that the profits to a large extent now realized from the business came from minor products, which a few years ago were regarded as having but little or no value. This subject will be further considered in another part of this Report.

#### THE FARMER'S COST OF LIVING.

Returning to the main branch of our inquiry we will next consider the farmer's cost of subsistence, or, in other words, his expense of living. Has this increased during the last ten years? By way of answering the inquiry the following tables are presented, giving the prices of all the leading articles consumed in maintaining himself and his family:



## PRICES AT A COUNTRY STORE IN CHESTER COUNTY, PENNSYLVANIA.

	Granulated sugar.	Rice.	Best Rio coffee.	Syrup.	New Orleans molasses.	Head light oil.	Tea.	G. A. salt.	Fine salt, one small sack.	Ten D. nails.	Shovels.	Spades.	Field rakes.	Garden rakes.	Hoes.	Pitch forks.	Manure forks.	Scythes.	Grain bags.	Coarse boots.	Mens' gum boots.	Appleton A. muslin.	Wamsutta muslin.	Standard gingham.	Standard calicoes.	Cheese.	Pepper.
1880.																											
Jan., . .	\$0 11	\$0 10	\$0 25	\$0 80	\$0 80	\$0 24	\$1 00	\$1 10	\$0 95	\$0 04	\$0 75	\$0 60	\$0 25	\$0 40	\$0 50	\$0 50	\$0 65	\$0 75	\$0 27	\$4 00	\$3 50	\$0 10	\$0 15	\$0 12	\$0 08	\$0 25	
April. . .	11	10	25	80	80	24	1 00	1 10	95	04	75	60	25	40	50	50	65	75	27	4 00	3 50	10	15	12	08	14	
July. . .	10	10	25	75	80	24	1 00	1 10	95	04	75	60	25	40	50	50	65	75	27	4 00	3 50	10	15	12	08	10	
Oct., . . .	10	10	25	75	80	24	1 00	1 10	95	04	75	60	25	40	50	50	65	75	27	4 00	3 50	10	15	12	08	13	
1881.																											
Jan., . .	10	10	25	70	75	24	80	1 00	90	03½	70	60	25	40	50	50	60	75	27	4 00	3 25	10	14	12	08	16	
April. . .	10	09	25	70	75	24	80	1 00	90	03½	70	60	25	35	50	50	60	75	27	4 00	3 25	10	14	12	08	14	
July. . .	10	09	25	70	75	22	80	1 00	90	03½	70	60	25	35	50	50	60	75	27	4 00	3 25	10	14	12	08	09	
Oct., . . .	11	08	25	60	75	20	75	1 10	90	03½	70	60	25	35	50	50	60	75	25	4 00	3 25	10	14	12	08	15	
1882.																											
Jan., . .	12	09	22	60	88	20	75	1 10	90	03½	70	60	25	35	50	50	60	75	25	4 00	3 15	10	14	12	08	18	
April. . .	11	09	22	60	88	17	75	1 10	90	03½	70	60	25	35	50	50	60	75	25	4 00	3 15	10	14	12	08	16	
July. . . .	10½	09	25	60	88	15	75	1 10	90	03½	70	60	25	35	50	50	60	60	25	4 00	3 15	10	14	12	08	10	
Oct., . . .	10	09	25	60	88	15	70	1 10	90	03½	70	60	25	35	50	50	60	60	25	4 00	3 15	10	14	12	08	14	
1883.																											
Jan., . .	10	09	25	65	80	16	70	1 10	90	03½	70	60	25	35	50	50	60	60	25	3 75	3 00	09	13	10	08	15	
April. . .	10	09	22	70	70	16	70	1 10	90	03½	65	50	25	30	40	45	60	60	25	3 75	3 00	09	13	10	08	14	
July. . . .	09½	09	20	65	70	16	70	1 10	90	03½	65	50	25	30	40	40	60	60	25	3 75	3 00	09	13	10	08	11	
Oct., . . .	09	09	20	60	70	15	70	1 10	90	03½	65	50	25	30	40	40	60	60	25	3 75	3 00	09	13	10	08	14	
1884.																											
Jan., . .	08	09	20	60	80	15	70	1 10	90	04	65	50	25	40	30	40	60	60	25	3 00	3 75	09	13	10	08	16	
April. . .	08	09	20	50	80	15	70	1 10	90	04	65	50	25	40	30	40	60	60	25	3 00	3 75	09	13	10	08	15	
July. . . .	08½	09	20	50	80	15	70	1 10	90	04	65	50	25	40	30	40	60	60	25	3 00	3 75	09	13	10	08	10	

Oct., . . . . . 1885.	08	09	20	50	80	15	70	1 10	90	04	65	50	25	30	40	40	60	60	25	3 75	3 60	09	13	10	08	15	25
Jan., . . . . .	06½	09	20	50	80	15	70	1 10	90	03½	60	50	25	30	40	40	60	60	25	3 75	3 00	09	12	10	08	15	25
April, . . . . .	07	08	20	50	80	15	70	1 00	90	03½	60	45	25	30	40	40	60	60	25	3 75	3 00	09	12	10	08	15	25
July, . . . . .	07	08	20	50	80	15	70	1 00	90	03½	60	45	25	30	40	40	60	60	25	3 75	3 00	09	12	10	08	12	25
Oct., . . . . . 1886.	07	08	20	50	80	15	70	1 00	90	03½	60	45	25	30	40	40	60	60	25	3 75	3 00	09	12	10	08	15	25
Jan., . . . . .	07	08	20	50	80	15	70	1 00	85	03½	60	45	25	30	40	40	60	60	25	3 50	3 00	09	12	10	08	18	25
April, . . . . .	07	08	20	50	80	15	70	95	85	03	55	45	25	30	40	40	60	60	25	3 50	3 00	09	12	10	08	16	25
July, . . . . .	07	08	20	50	80	14	70	95	85	03	55	45	25	30	40	40	50	60	25	3 50	3 00	09	12	10	08	11	25
Oct., . . . . . 1887.	07	08	18	50	80	14	70	95	85	03	55	45	25	30	40	40	50	60	25	3 50	3 00	09	12	10	08	15	25
Jan., . . . . .	06½	07	20	50	80	14	70	95	85	03	55	45	25	30	40	40	50	60	25	3 50	2 90	09	12	10	08	15	25
April, . . . . .	06½	06	22	50	80	14	70	95	85	03	55	45	25	25	40	40	50	60	25	3 50	2 90	09	12	10	08	14	25
July, . . . . .	06½	06	22	50	80	14	70	95	85	03	55	45	25	25	40	40	50	60	25	3 50	2 90	09	12	10	08	10	25
Oct., . . . . . 1888.	06½	06	25	50	80	14	70	95	85	03	55	45	25	25	40	40	50	60	25	3 50	2 90	09	12	10	08	15	25
Jan., . . . . .	07	07	28	50	80	14	70	95	85	03	55	45	25	25	40	40	50	60	25	3 50	2 90	08	12	10	07	16	25
April, . . . . .	07	07	28	50	80	14	70	95	85	03	50	45	25	25	40	40	50	60	25	3 50	2 90	08	11	10	07	17	25
July, . . . . .	07½	07	28	50	80	12	70	95	85	03	50	45	25	25	40	40	50	50	25	3 50	2 90	08	11	10	07	11	25
Oct., . . . . . 1889.	08	07	28	50	80	12	70	90	85	03	50	45	25	25	40	40	50	50	25	3 50	2 90	08	11	10	07	14	25
Jan., . . . . .	07½	07	28	50	80	14	70	90	85	03	50	45	25	25	40	40	50	50	25	3 50	2 85	08	11	10	07	15	25
April, . . . . .	08	07	28	50	80	14	70	90	85	03	50	40	25	25	40	40	50	50	25	3 50	2 85	08	11	10	07	15	25
July, . . . . .	08½	07	26	50	80	12	70	90	85	03	50	40	25	25	40	40	50	50	25	3 50	2 85	08	11	10	07	12	25
Oct., . . . . . 1890.	08	07	26	50	80	12	70	90	85	03	50	40	25	25	40	40	50	50	25	3 50	2 85	08	11	10	07	15	25
Jan., . . . . .	07	07	28	50	80	13	70	90	85	03	50	40	25	25	40	40	50	50	25	50	85	08	11	10	07	16	25
April, . . . . .	07	07	28	50	80	13	70	90	85	03	50	40	25	25	40	40	50	50	25	3 50	2 85	08	11	10	07	16	25
July, . . . . .	07	07	28	50	80	12	70	90	85	03	50	40	25	25	40	40	50	50	25	3 50	2 85	08	11	10	07	14	25
Oct., . . . . .	07	07	28	50	80	12	70	85	85	03	50	40	25	25	40	40	50	50	25	3 50	2 85	08	11	10	07	16	25

## PRICES AT A COUNTRY STORE IN CENTRAL PENNSYLVANIA.

	Sugar, A. pound.	Sugar, C. pound.	Rice, pound.	Tea black, pound.	Coffee Rio, pound.	Syrup, gallon.	Kerosene, gallon.	Shovels, steel, each.	Hoes.	Salt, G. A., sack.
<i>1880.</i>										
January, . . . . .	\$0 12	\$0 10	\$0 10	\$0 75	\$0 22	\$0 50	\$0 20	\$0 75	\$0 50	\$1 45
April, . . . . .	12	10	10	75	20	50	20	75	50	1 45
July, . . . . .	12	10	10	75	20	50	20	75	50	1 45
October, . . . . .	12	10	10	75	20	50	20	75	50	1 45
<i>1881.</i>										
January, . . . . .	11	9	9	75	20	50	20	75	50	1 45
April, . . . . .	11	9	9	75	18	50	20	75	50	1 40
July, . . . . .	11	9	8	75	18	45	20	65	50	1 40
October, . . . . .	12	9	10	75	16	50	20	65	50	1 50
<i>1882.</i>										
January, . . . . .	11	9	10	75	16	50	20	65	50	1 45
April, . . . . .	12	10	10	75	15	60	20	65	40	1 45
July, . . . . .	12	10	10	75	15	60	20	65	40	1 45
October, . . . . .	12	10	10	75	13	50	20	65	40	1 45
<i>1883.</i>										
January, . . . . .	11	9	10	75	13	50	20	65	40	1 45
April, . . . . .	10	9	9	75	14	50	20	65	40	1 45
July, . . . . .	10	8	9	75	13	50	20	60	40	1 40
October, . . . . .	10	8	9	75	14	50	20	60	40	1 45
<i>1884.</i>										
January, . . . . .	10	8	9	75	15	45	20	60	40	1 45
April, . . . . .	8	7	9	70	16	50	20	50	35	1 40
July, . . . . .	8	7	9	70	14	50	20	50	35	1 40
October, . . . . .	8	7	9	70	14	50	18	50	35	1 40
<i>1885.</i>										
January, . . . . .	8	7	9	70	14	45	18	50	35	1 40
April, . . . . .	8	7	8	70	12½	45	18	50	35	1 40
July, . . . . .	8	7	8	70	12½	50	18	50	35	1 40
October, . . . . .	8	7	8	70	12½	45	18	50	35	1 40
<i>1886.</i>										
January, . . . . .	8	7	8	70	12	45	18	30	35	1 40
April, . . . . .	7	6	8	70	13	40	18	50	35	1 40
July, . . . . .	7	6	8	70	13	40	18	50	35	1 35
October, . . . . .	7	6	8	70	16	45	18	50	35	1 35
<i>1887.</i>										
January, . . . . .	7	6	8	70	18	45	18	50	35	1 35
April, . . . . .	7	6	8	70	20	45	18	50	35	1 35
July, . . . . .	7	6	8	70	25	45	18	50	35	1 35
October, . . . . .	8	7	8	70	25	45	18	50	35	1 35
<i>1888.</i>										
January, . . . . .	8	7	8	70	25	45	18	50	35	1 35
April, . . . . .	8	7	9	70	20	45	18	50	35	1 35
July, . . . . .	8	7	9	70	22	50	18	50	35	1 35

PRICES AT A COUNTRY STORE IN CENTRAL PENNSYLVANIA—*Continued.*

	Sugar, A., pound.	Sugar, C., pound.	Rice, pound.	Tea black, pound.	Coffee, Rio, pound.	Syrup, gallon.	Kerosene, gallon.	Shovels, steel, each.	Hoes, each.	Salt, G. A., sack.
October. . . . .	\$0 8	\$0 7	\$0 9	\$0 70	\$0 23	\$0 50	\$0 18	\$0 50	0\$ 35	\$1 35
1889.										
January. . . . .	8	7	8	70	23	50	18	50	35	1 35
April. . . . .	9	8	8	70	23	45	18	50	35	1 35
July. . . . .	9	8	8	70	23	45	18	50	35	1 35
October. . . . .	9	8	8	70	25	45	18	50	35	1 35
1890.										
January. . . . .	8	7	8	70	25	45	18	50	35	1 25
April. . . . .	7	6	8	70	25	45	18	50	35	1 25
July. . . . .	7	6	8	70	26	45	18	50	35	1 25
October. . . . .	7	6	8	70	25	50	18	50	35	1 25

RETAIL PRICES OF WHEAT, CORN AND OATS AT WEST CHESTER, CHESTER  
COUNTY, PA., FROM 1880 to 1890.

*Wheat.*

	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1888.	1890.
January. . . . .	\$1 55	\$1 20	\$1 06	\$1 06½	\$1 11	\$0 83	\$0 91	\$0 92½	\$0 88	\$1 00	\$0 90
April. . . . .	1 50	1 20	1 07	1 20	1 15	91½	97	1 02	82	95	86
July. . . . .	1 18	1 15	1 06½	1 22½	98	1 08	87	98½	85½	90	87
October. . . . .	1 20	1 18	1 06½	1 09	87	96	86	93	1 18	87	99½

*Corn.*

January, . . . .	\$0 75	\$0 65	\$0 85	\$0 80	\$0 70	\$0 65	\$0 55	\$0 55	\$0 65	\$0 55	\$0 55
April, . . . . .	70	65	95	75	70	60	60	60	65	60	55
July, . . . . .	70	65	1 00	75	70	70	60	65	70	60	60
October. . . . .	70	85	90	75	75	70	60	60	65	55	70

*Oats.*

January. . . . .	\$0 50	\$0 50	\$0 60	\$0 60	\$0 50	\$0 45	\$0 45	\$0 45	\$0 50	\$0 40	\$0 40
April. . . . .	50	50	65	60	50	45	50	45	45	45	40
July. . . . .	50	55	70	55	50	50	47	45	50	45	40
October. . . . .	50	60	55	50	45	45	40	45	42	45	60



What does this table show? First, that the prices of most of the things purchased have declined nearly as much as the prices of the farmer's products, with few exceptions. Even the exceptions are of recent date. For example, it will be seen that the price of granulated sugar, which is an important item, had been steadily declining until the sugar trust was formed in 1887, when the price advanced from six and a half to eight cents per pound. On the other hand, the decline in the prices of some articles has been greater in proportion than that in agricultural products. Whether trust companies and similar organizations are justified in demanding the high prices which in many cases buyers have been obliged to pay is one of the grave questions of the time. This, however, may be truly said of them, before combining, in almost every case, the prices of their products had fallen so low that little or no profit remained.

It is said of the sugar refiners that, at the time of combining, a large amount of capital had been invested in the business, and their prospects were dark enough. The only escape from loss or bankruptcy seemed to be in combining. Had they, after doing so, only sought to get a fair profit, probably the public would not have complained of their action. They certainly are just as much entitled to a fair profit on their capital and skill as other people on theirs, but they sought to get more than a fair profit, and this is clearly proved by the enormous dividends made by the companies since their conversion into a single company. Their property has been capitalized at several times its original cost, and enough is to be exacted for sugar to pay an eight or ten per cent. dividend on its present valuation.

The origin of most of these modern combinations has been similar. The persons thus uniting had not been doing a profitable business and they united in order to improve their business. Had they endeavored to make only a fair profit probably the public disapproval would not have been very general, but, as in the case of the sugar refiners, they have tried to get more than a fair profit, and consequently the public, with reason, is complaining.

The farmer, therefore, in common with every other class, is unquestionably suffering from monopolized products, and the question may be as profitably considered here as anywhere, what remedy, if any, can be adopted to prevent such abuses? One remedy, which may be called the natural or societary, is to let the monopolists alone, believing that the motive which has led them into the movement is quite as strong in others, and will lead them to engage in a similar business, and that the competitive warfare thus kindled will result in the fall of prices to a just level. A single illustration may be given to show the working of this remedy. A large number of companies in New England were engaged in making small nails, and as competition among them became keen, profits were reduced to zero. At last they met together, formed a trust, ad-



vanced the price of nails and their losses ceased. The price of nails was advanced only enough to earn fair dividends, and this happy and prosperous family continued for two years, during which period ten per cent. dividends were regularly declared. At the end of that time some of the members, not satisfied with these profits, insisted on advancing the price of nails so that the profits might be twenty-five or thirty per cent. on the capital invested. The wiser objected, saying that such profits would attract others into the business and that in a little while they would be ruined, but the greedy party was strong enough to carry the day, and so prices were advanced and the dividends for a time were greatly increased. The day of golden prosperity, however, was short, for the great profits were soon discovered, others entered the business, and within two years the combination was bankrupt, and this is likely to be the end of all the monopolies now existing, at no distant day, even if the state does not interfere. The monopolists in most cases are seeking for such extravagant profits that others, who are equally greedy, are sure to enter the field and engage in a fierce competition for the trade, and in the end prices will be greatly lessened.

We may, therefore, conclude that, even if no legal steps are taken to overthrow these newly-created enterprises, they will in a short period go to pieces; in other words, the forces which have started them into being will ultimately destroy them. Others will be just as eager to make money as the persons who are now engaged in them, and who, believing that a better opportunity for making money exists in these ways than in any other, will forthwith enter into the race, and in a few years competition between the newly-created and the older concerns will be as sharp as ever. Already evidences exist of such a temper and movement.

The foregoing may be considered as the natural or societary method of overcoming trusts or monopolies. Shall they be prevented or limited in their operations by law? This depends on the question whether the government can deal effectively with them. If the government is powerless; if the evil is quite beyond its range of action then, of course, the government should refrain from attempting to do anything, and leave the destruction of the trusts to other forces; but if the government can deal effectively with them ought it not to do so, and speedily? It is maintained that there should be legislation, indeed, congress has already enacted a statute on the subject. But we think that it might deal in a bolder and far more effective manner by adopting legislation of a simpler character. Suppose congress should withhold the protection of the tariff on all things produced by a trust so long as it existed. Would not this legislation have the desired effect? Suppose, for example, congress should enact that, so long as all the persons or corporations engaged in making a given product were formed into a single company for the purpose of selling their product at the highest possible prices and thereby making undue profits at the loss or disadvantage of the

consumer, then products of like character should be imported free of duty. It is certain that the prices would fall to the same level as the foreign prices with the additional cost of transportation to this country, unless, indeed, foreign manufacturers could be persuaded to join the combination. The effectiveness of this remedy no one will question.

How would such legislation operate? Would not the manufacturers who now gain by the protective system refrain from entering into such combinations, well knowing that, as the result of making them, protection would be denied to them and that consequently the prices of their products would fall to the level of similar products abroad. We do not believe that it would be needful to withdraw the protection in any case for the simple reason that, if the right to withdraw it existed in the event of forming such a combination, this fear would operate as a healthy and effective restriction to such action. The manufacturers would realize that the adoption of such a policy would work their own destruction. Consequently they would manufacture as they did formerly, each company operating independently and finding a market for itself and obtaining the best prices possible, and thus gaining the benefit which comes from the existing protective policy. Surely they would be very short-sighted to combine for the purpose of raising prices when, as the effect of the combination, the tariff would be removed, and the strongest wall now protecting them from the foreign manufacturer be wholly removed.

Nor do we believe that this suggestion infringes the spirit of our protective system. Those who best understand it, and have lived under it the longest, lament sincerely the existence of these combinations, for they know that the evils arising from them are imperiling the future of that system. Its object all along has been to shut out foreign products, leaving the American field open to the freest competition among themselves. It has been contended from the beginning that such competition would be healthy and keep prices at a reasonably low level; but all can see that by shutting out the foreign product by force of law and by permitting the manufacturers in a given product to combine among themselves, all competition is destroyed, and a monopoly is created that does violence to all the teachings of the protectionists from the beginning. These trusts are no part of the protectionist creed; they are at open war with it everywhere. The protectionist fully believes in the freest competition within his own country; he regards this as absolutely necessary for the healthy development of the state; these trusts then are an excrescence, they are no part of the rightful growth of the protectionist system, and should be cut off without delay. They should not be permitted to grow any longer in the sunlight of a protective tariff. It was not created for such a purpose; and if it has this effect, it should be speedily prevented by a proper amendment of the law.

We do not contend that competition is a perfect regulator in these

matters. But when either competition or monopoly must prevail, then society, on the whole, will fare better under the sway of competition than under that of monopoly. But it should be borne in mind that very often the object of competition is to destroy competitors and thus establish a monopoly, and when this is the case, society should move slowly in favoring the lowest competitor. Again and again have society been so short-sighted as to favor, temporarily, the lowest competitor and thus enable him to destroy all competing with him and cause the very monopoly he desired to establish, and to which all others were strenuously opposed. When competition has this object in view, it is just as baneful to society as a monopoly; and it may be added that when competition becomes excessive, when business is done at a loss, this is often the result. No man can continue to produce and exchange permanently at a loss. Only healthy competition, which leaves a margin of profits, but stimulating at the same time all proper economies, is desirable. A competition that would go further than this and drive others from the business and leave the field clear, in the end, for a monopoly should be hardly less dreaded than the establishment of a monopoly in the beginning.

Having shown how the profits on farm products are divided between the different classes who have been engaged in producing, transporting and exchanging them during the last ten years, we will look in other directions for the purpose of discovering, if possible, the causes from which the farmers are suffering.

#### THE SETTLEMENT OF WESTERN LANDS.

One of these causes, which is worthy of examination, is the rapid settlement of land belonging to the railroad companies, which has been given to them as a bonus or inducement for constructing their roads. This policy of donating land to them is an old one, having been introduced as early as 1827. The Illinois Central, the Michigan Central, and several other of the leading western railroad companies, obtained large donations from their respective states, and from their sale during subsequent years large profits have accrued. The National Government has pursued a similar policy. The quantity of land thus donated during the last forty years to the railroad companies is 53,162,077 acres.

Having obtained these lands and built their roads, of course the railroad companies were desirous of settling them as speedily as possible in order to increase their business. The steamship companies have stimulated the movement by making known the advantage of living in this country, and by transporting immigrants at low prices. Having reached our shore they have been attracted westward by the offer of cheap railroad lands and easy terms of payment.

It will be seen, therefore, that the railroad companies, from one point



of view, have been the worst enemies to the Pennsylvania farmer, or the eastern farmer in general, as they have stimulated the settlement of the land, and thus swelled the quantity of land products. The increase in the production of grain and provisions of all kinds, has been far greater than that of population, as the following tables clearly show :

*Increased and Decreased Percentages in Population and Production from 1860 to 1890.*

	1860 to 1876.		1870 to 1880.		1880 to 1890.	
	Increase in number.	Per cent.	Increase in number.	Per cent.	Increase in number.	Per cent.
Population, . . . . .	7, 115, 050	22.63	11, 597, 412	30.08	22, 466, 467	24.86
Horses, . . . . .	896, 196	14.34	3, 212, 118	44.95	3, 856, 349	37.13
Mules, . . . . .	*25, 733	*2.23	687, 393	61.07	518, 219	28.58
Milch cows, . . . . .	353, 597	4.12	3, 507, 788	39.25	3, 509, 763	28.20
Oxen, . . . . .	*2, 149, 008	*12.61	8, 597, 115	57.75	13, 366, 633	56.92
Sheep, . . . . .	6, 006, 676	26.73	6, 714, 123	23.57	9, 143, 998	25.98
Swine, . . . . .	*8, 378, 298	*25.	22, 547, 131	89.70	3, 921, 080	8.22
Total number of farm animals. . .	*3, 296, 570	*3.70	45, 255, 668	52.80	34, 316, 042	26.20
Corn, . . . . .	<i>Bushels.</i> 255, 282, 258	30.42	<i>Bushels.</i> 623, 179, 543	56.95	<i>Bushels.</i> *227, 464, 543	*13.24
Wheat, . . . . .	62, 679, 776	36.20	262, 665, 168	111.31	*99, 287, 868	*19.91
Oats, . . . . .	74, 634, 215	43.23	170, 607, 980	68.97	105, 735, 620	25.32

\* Decrease. All others increase.



*Increase and Decrease in Population and Production in the United States from 1860 to 1890.*

YEARS.	Number of horses	Number of mules.	Number of milch cows	Number of oxen.	Number of sheep	Number of swine	Total number of farm animals.	Total population
1860.*	6,249,174	1,151,148	8,581,755	17,034,284	22,471,275	33,512,867	89,000,483	31,443,321
1867.	5,401,263	822,386	8,348,773	11,730,452	39,385,386	24,633,534	90,382,294	
1868.	5,756,940	855,085	8,691,508	11,942,484	38,991,912	24,317,258	90,555,847	
1869.	6,332,793	721,662	9,247,714	12,185,375	37,724,279	23,316,476	89,728,309	
1870.*	7,145,370	1,125,415	8,935,332	14,885,276	28,477,951	25,134,569	88,703,913	
1871.	8,702,000	1,242,300	10,023,000	16,212,200	31,651,000	29,457,500	97,488,000	
1872.	8,990,900	1,303,500	10,303,500	16,389,800	31,679,300	31,736,300	100,416,100	
1873.	9,222,470	1,310,000	10,575,900	16,413,800	33,002,400	32,632,050	103,156,020	
1874.	9,333,800	1,339,350	10,705,300	16,218,100	33,938,200	30,860,900	102,385,650	
1875.	9,504,200	1,366,750	10,806,800	16,313,400	33,783,600	28,062,200	99,963,950	
1876.	9,755,300	1,414,500	11,085,400	16,785,300	35,335,300	25,726,800	100,082,600	
1877.	10,158,400	1,443,500	11,260,800	17,956,100	35,804,200	28,077,100	104,037,100	
1878.	10,329,700	1,637,700	11,300,100	19,223,300	35,740,500	32,262,500	110,493,800	
1879.	10,938,700	1,713,100	11,526,400	21,408,100	38,123,800	34,706,100	118,775,200	
1880.*	10,357,488	1,812,808	12,443,120	23,482,391	35,192,074	47,081,700	130,969,581	50,155,783
1881.	11,429,626	1,720,731	12,368,653	20,437,702	43,573,899	36,247,603	129,281,214	
1882.	10,521,554	1,835,866	12,611,632	23,280,238	45,019,224	44,122,200	137,387,714	
1883.	10,838,111	1,871,079	13,125,085	28,046,077	49,237,291	43,270,086	140,388,329	
1884.	11,169,683	1,914,126	13,601,206	29,046,101	50,626,626	44,200,839	150,462,581	
1885.	11,564,572	1,972,569	13,904,722	29,866,573	50,860,243	43,142,657	152,811,356	
1886.	12,077,637	2,052,593	14,235,388	31,215,242	46,092,351	44,612,836	154,055,254	
1887.	12,496,744	2,117,141	14,322,083	33,511,750	44,759,313	44,340,525	152,019,867	
1888.	13,172,396	2,191,727	14,856,414	34,378,363	43,544,755	44,340,525	152,490,720	
1889.	13,063,294	2,257,574	15,298,025	35,032,417	42,599,079	50,301,592	150,152,581	
1890.*	14,213,857	2,331,027	15,952,883	36,849,024	44,336,072	51,602,780	165,285,023	62,622,250

\* Taken from census returns which are collected on June 1, all others are taken from report made to Commissioner of Agriculture of January 1 of each year.

*Increase and Decrease in Population and Production from 1860 to 1890.*

YEARS.	Bushels of corn.	Bushels of wheat.	Bushels of oats.	Total population U. S.
1860. . . . .	838,972,742	173,104,924	172,643,185	31,443,321
1867, * . . . .	768,320,000	212,441,400	278,698,000	. . . . .
1868, * . . . .	906,527,000	224,036,600	254,960,800	. . . . .
1869. . . . .	874,520,000	260,146,900	288,334,000	. . . . .
1870. . . . .	1,094,255,000	235,884,700	247,277,400	38,558,371
1871. . . . .	991,898,000	230,722,400	255,743,000	. . . . .
1872. . . . .	1,092,719,000	249,997,100	271,747,000	. . . . .
1873. . . . .	932,274,000	281,254,700	270,340,000	. . . . .
1874. . . . .	850,148,500	308,102,700	240,369,000	. . . . .
1875. . . . .	1,321,069,000	292,136,000	354,317,500	. . . . .
1876. . . . .	1,283,827,500	289,956,500	320,884,000	. . . . .
1877. . . . .	1,342,558,000	364,194,146	406,394,000	. . . . .
1878. . . . .	1,388,218,750	420,122,400	413,587,560	. . . . .
1879. . . . .	1,547,901,790	448,756,630	363,761,320	. . . . .
1880. . . . .	1,717,434,543	498,549,868	417,885,380	50,155,783
1881. . . . .	1,194,916,000	383,280,000	416,481,000	. . . . .
1882. . . . .	1,617,025,100	504,185,470	488,250,610	. . . . .
1883. . . . .	1,551,066,895	421,086,160	571,302,400	. . . . .
1884. . . . .	1,795,528,000	512,765,000	583,628,000	. . . . .
1885. . . . .	1,936,176,000	357,112,009	629,409,000	. . . . .
1886. . . . .	1,665,441,000	457,218,000	624,134,000	. . . . .
1887. . . . .	1,456,161,000	456,329,000	659,618,000	. . . . .
1888. . . . .	1,987,790,000	415,868,000	701,735,000	. . . . .
1889. . . . .	2,112,892,000	490,560,000	751,515,000	. . . . .
1890. . . . .	1,489,970,000	399,262,000	523,621,000	62,622,250

\* Oregon not included, excepting in production of corn and wheat.

INCREASE AND DECREASE IN POPULATION, FARMS, STAPLE PRODUCTS. AT INTERVALS OF TEN YEARS FROM 1850 TO 1889.\*

	1850 to 1860.	1860 to 1870.	1870 to 1880.	1880 to 1889.
Population, . . . . .	30	23	30	27
Number of farms, . . . . .	41	30	51	27
Cattle, . . . . .	30	†7	40	51
Swine, . . . . .	43	†25	91	45
Bales of cotton, . . . . .	117	†42	91	45
Acres in corn, . . . . .	41	24	61	26
Acres in wheat, . . . . .	70	66	49	70
Acres in oats, . . . . .	17	50	101	7.4

YEARS.	Total population.	Total employed.	Number employed in agriculture.	Percentage employed in agriculture to total population.	Percentage employed in agriculture to total employed.
1860, . . . . .	31,743,321	8,287,043	3,221,526	10.24	38.87
1870, . . . . .	38,558,371	12,505,923	5,922,471	15.36	47.35
1880, . . . . .	50,155,783	17,392,099	7,670,493	15.49	44.10
1890, . . . . .	62,622,250	.....	.....	.....	.....

INCREASE PERCENTAGE IN POPULATION, FARMS AND STAPLE PRODUCTS FOR A PERIOD OF THIRTY-NINE YEARS ENDING IN 1889.

Population, . . . . .	175 per cent.	Bales of cotton, . . . . .	201 per cent.
Number of farms, . . . . .	260 " "	Bushels of corn, . . . . .	257 " "
Cattle, . . . . .	185 " "	Bushels of wheat, . . . . .	389 " "
Swine, . . . . .	66 " "	Bushels of oats, . . . . .	411 " "

From these figures it is not difficult to perceive why the eastern farmers are suffering. Land has been rapidly settled, the capital invested in them has been very small in proportion to the capital invested in eastern farms of the same productive power, while the new railroad companies have been obliged to give such rates, whether they wished to do so or not, as would encourage the movement. Consequently the settlement of them has gone on at a wonderful rate, and farm products have increased far beyond the increase in population, as we have already shown.

\* These tables appeared in the April number of the *Forum*, 1890.  
† Decrease. All others increase.

A few years ago the situation was very different. The Pennsylvania farmer had practically a monopoly in supplying the inhabitants of the state with beef, mutton, provisions and farm products of all kinds. The prices, therefore, were largely within his control, and the farmer, judging from the following figures, was not much slower than other persons to take advantage of their favorable situation. Thus the profits on a one-hundred-acre farm for a year ending April 1, 1865 were:

250 bushels wheat at \$2.50 . . . . .	\$625 00
400 bushels oats at \$1.00, . . . . .	400 00
500 bushels corn at \$1.40, . . . . .	700 00
300 bushels potatoes at \$1.50, . . . . .	450 00
2,400 pounds butter at 60 cents, . . . . .	1,440 00
Pork, lamb, veal, wood, hay, poultry, fruit and dairy products, . . . . .	600 00
Total, . . . . .	<u>\$4,215 00</u>

The farmer's expenses, including \$300 for a hired man, \$100 for a boy, \$150 for a girl, \$125 for harvest labor, \$300 for taxes and repairs, \$400 for feed, and \$150 for incidentals, were put down at \$1,525 leaving him a profit of \$2,690 for the year.

This statement was prepared by Col. T. W. Bean, of Montgomery county, and is doubtless correct. The enormous decline since then shows clearly enough what has happened. The control of the markets has passed away from the eastern farmer, perhaps never to be regained. Thus we begin to see clearly what has happened during the last quarter of a century. The farmers in Pennsylvania and the east generally, have not suffered so much perhaps from any lack of skill of their own, or lack of intelligence in cultivating their lands, as from the cheaper lands of the west, whereby those who occupied them are able to under-sell their eastern competitors. Before these lands were so extensively settled the eastern farmer had control, to a great extent, of their markets; now this has passed to those who are producing on cheaper and better lands, and in much larger quantities.

#### SILVER—FOREIGN COMPETITION.

The next cause to be considered is competition in wheat growing with the countries of India and Russia. A few years ago the export trade was very large; it has now shrunk to much smaller proportions. Several causes for the shrinkage have been assigned, speculation, transportation, the increase in production in other countries, and the decline in the value of silver. These will be considered in their order, but before doing so let us briefly consider how the export trade in wheat arose: what was its origin?

For a period of thirty-five years, between 1825 and 1860, only 387,340,302 bushels were exported, while the exports for the two years, 1879 and 1880, were 366,625,694 bushels. Thus the exports for two years were nearly as great as for the entire thirty-five above mentioned. The enormous increase may be easily explained. Prior to 1860 the export of wheat was



small, and even during the next twelve years, as will be seen from the table given below, the exports did not greatly increase in quantity. Then the increase began chiefly for the reason that the crops in western Europe were much less, while the Russian and India supplies were inadequate to meet the new demands.

EXPORTS FROM THE UNITED STATES OF BUSHELS OF WHEAT AND BARRELS OF WHEAT FLOUR, FROM 1861 TO 1891.

YEARS.	Number of bushels.	Number of barrels.	YEARS.	Number of bushels.	Number of barrels.
1861. . . . .	31,238,057	4,323,756	1876. . . . .	55,073,122	3,935,512
1862. . . . .	37,289,572	4,882,033	1877. . . . .	40,325,611	3,343,665
1863. . . . .	36,160,414	4,390,055	1878. . . . .	72,404,961	3,947,333
1864. . . . .	23,681,712	3,557,347	1879. . . . .	122,353,936	5,629,714
1865. . . . .	9,397,876	2,641,298	1880. . . . .	153,252,795	6,011,419
1866. . . . .	5,579,103	2,183,060	1881. . . . .	150,565,477	7,945,786
1867. . . . .	6,146,411	1,300,106	1882. . . . .	95,271,802	5,915,686
1868. . . . .	15,940,899	2,076,423	1883. . . . .	106,385,828	9,205,664
1869. . . . .	17,557,836	2,431,873	1884. . . . .	76,349,012	9,152,260
1870. . . . .	36,584,115	3,463,333	1885. . . . .	84,653,714	0,648,145
1871. . . . .	34,310,906	3,653,841	1886. . . . .	57,759,209	8,178,241
1872. . . . .	26,423,080	2,514,535	1887. . . . .	101,971,949	11,518,449
1873. . . . .	39,204,285	2,562,086	1888. . . . .	65,789,261	11,963,574
1874. . . . .	71,039,928	4,094,094	1889. . . . .	46,414,129	9,374,803
1875. . . . .	53,047,177	3,973,128	1890. . . . .	49,271,580	11,319,456

After Western Europe, turned to the United States for a supply, the demand continued so long that many came to believe that it would be permanent. The exports of flour during this period enormously increased, and many believed that the days of the English miller were numbered. The following extract, in proof of this assertion, from the *Mark Lane Express*, (one of the best authorities on such subjects in England) in October, 1886, will be read with singular interest at the present time: "The flour trade is very much depressed by the large arrivals of American brands, which have been sold at unprecedentedly low rates, and it has been stated that not a few country millers have shut down rather than persist in the hopeless attempt to make flour which can compete with the produce of the United States. The future of the British country milling trade is a problem which appears likely to be solved by the American miller simply crushing our native milling industry out of existence. And that is not all, for the entire agricultural interests of this country are being degraded, demoralized, and destroyed by an overwhelming foreign competition."

Soon the tide changed. Speculation in wheat in the United States set in strongly. It was believed that Europe must look to this country

for a permanent supply, and that it was quite within the power of the speculator to control the market. A series of speculations occurred which demoralized the market, and which lead foreign purchasers to turn to other quarters of the world for a supply. It is unquestionably true that speculators were largely to blame for the destruction of the export market. Now that our export trade has greatly diminished, congress is taking steps to prohibit the practices which have been so utterly destructive to the welfare and prosperity of the American farmer.

We, may, therefore ascribe the desire of foreign purchasers of grain to obtain their supplies elsewhere, first, to the action of American speculators in manipulating prices whereby foreign purchasers were unable to buy in this country to any advantage. The next cause operating in favor of the foreign purchasers, was the revival of English milling. This was due to the invention of the roller process. One of the consequences of the adoption of this process is that a larger quantity of flour can be obtained from wheat. A good authority says, that nearly ninety per cent. of the wheat milled by the roller process goes into flour, thus increasing the flour-producing capacity of a crop of wheat fifteen per cent. This is done by putting in mill dust, or flour-mill dynamite (which causes flour-mill explosions) also mill sweepings and screenings, which are known in the trade as "red dog." It will be readily seen that this large increase in the flour product of wheat must be taken into consideration in estimating the increase in the wheat production of the country.

In 1888, two years after the English milling industry seemed to be doomed, the *Northwestern Miller* remarked:

Our London correspondent casually notes that milling in England in 1888, thanks to the falling off in the American competition, was a very paying industry. A firm in Cardiff, he says, has just published its balance-sheet which shows a profit of \$475,000. After carrying \$120,000 to the reserve fund there was left a modest dividend of 17½ per cent. The idea of an English milling firm having the consummate audacity to make such a showing may well shock the sensibilities of its American rival. We are used to regard the British miller with pitying condescension slightly tempered with quiet scorn. He is popularly supposed to be half a century behind the times, and to be unable to make either good flour or good profits, and here he is showing up a balance-sheet which would make the average American miller's mouth water to think of.

It may be rank heresy to say so, but the truth is that the American miller with his flamboyant ideas of national greatness, his indifference and scorn of foreign competition, his haughty disregard of the wants and needs of his foreign trade, and his general tendency to let the export trade seek him through channels of its own making, is, unknown to himself, drifting slowly, but none the less surely, into the land of the obsolete. While so far his tendency this way is almost imperceptible, it nevertheless exists.

Thus, by the conduct of speculators, by the invention of the roller process, and by extending the area of wheat, exports from this country

have been very seriously diminished. All these causes must be considered in accounting for the decline of American wheat exports regardless of the decline in the value of silver.

It should also be remarked that the producers of wheat in this country have been, until within a few years, altogether too confident of holding the foreign market, for they supposed that, with the splendid facilities for transportation which exist, and the cheap lands on which wheat was raised, the certainty of a crop, the low prices paid for agricultural implements, the large quantity of work which can be performed by them, in short, that the production of wheat at a low cost was so favorable, the export market could be maintained against all others. This was so confidently believed by American producers that they did not trouble themselves to examine into the conditions of foreign production, and ignored all warnings that came from the other side. They have now learned better and that in Russia especially there is an enormous body of land of unsurpassed and seemingly inexhaustible fertility, with the single drawback of a lack of transportation facilities. The Russian government however is piercing this territory with railroads and the production of wheat on these wonderful plains is rapidly increasing. With respect to India, the danger of successful competition is not so great, but the favorable conditions for Russian production can no longer be ignored.

The American wheat producer has believed that if the British wheat grower was driven from the field he would not return. For several years indeed the quantity of land used for pasturage purposes increased; but such a use of it could be only temporary. Either it would be used for wheat raising as before or for other crops. A period might indeed elapse before reducing rents, procuring new tenants, and renewing the work of production, but these things were sure to happen. Competition in raising products from the soil is quite unlike competition in making manufactured products. A manufacturer fails, his works are burned or become too antiquated to be profitably run, and they cease to exist. But if a tenant fails to raise wheat at a profit, he may indeed retire from the scene, but the land remains and will surely be used by some one, and this is as true of the land in Great Britain as of the land in the western states of the Union. It may be that less wheat will be grown in Great Britain, but the only effect of this will be to increase the quantity of substituted products which, in turn, will lessen the demand for wheat. Thus the lands that have been longest cultivated will continue to be regardless of their value, and thus competition from these sources will not be lessened. Succeeding tenants may fail in the pitiless contest and abandon their fields until the landlord can find none, and be obliged to cultivate them himself, but surely he cannot be driven off unless the value of the things produced is less than the cost of producing them, reckoning nothing for the use of the land itself.



It should also be remarked that the opening of the Suez canal stimulated the exportation of wheat from India. Before that event it was transported twice across the equator and often suffered from heating. The new route is not only shorter, and less expensive, but is as favorable to the exportation of the crop in good condition as any other route for the exportation of wheat.

We are now ready to consider the effects of a decline in the value of silver in diminishing the export of American wheat and other farm products. To make the explanation as simple as possible, let us suppose that the moneys employed in England and India are the same as those in the United States; and that, twenty years ago in England and India and United States a silver dollar could buy just as much wheat or other thing as a gold dollar. Let us also suppose that wheat was then a dollar a bushel in India. An English importer of wheat buys five hundred bushels. It is of no consequence to him whether he sends five hundred silver dollars or five hundred gold dollars to pay for it, because the value of both kinds of dollars is the same; but within a few years the value of the silver dollar, compared with the gold dollar, has declined twenty per cent. in Great Britain, while no change in its value has occurred in India. If now the English importer desires to import wheat into England he no longer sends gold dollars but silver ones. If he does not have them he exchanges his five hundred gold dollars for six hundred silver ones and sends them to India, for the simple reason that he can buy a hundred bushels more of wheat with these than he could if he sent gold ones. This is precisely what has happened; the legal as well as the market value of silver has declined in England but not in India, while the legal value of silver has not declined in this country, consequently the English importer is the gainer by purchasing wheat in India instead of the United States.

Perhaps the subject can be made clearer by explaining the market and the legal value of silver. By legal value is meant the value fixed by the government, by market value that given in commerce. The government declares that a silver dollar has the same value as a gold dollar, and is just as willing to take it at the custom house, or for any obligation, as a gold one. But if the silver contained in a silver dollar was uncoined, the government would give, at the present time, say only eighty cents for it, while the quantity of gold contained in a gold dollar, if uncoined, it would give a gold dollar. And the conduct of individuals in this country is similar. They give and receive silver dollars as the equivalent of gold dollars, but they are not willing to give for the quantity of silver used in the coinage of a silver dollar, but eighty cents.

Now, in England the importer can buy silver rupees, which is the chief silver money of India, at their market value and send them to India and exchange them at their legal value (which is twenty per cent. greater) for wheat in that country, and gains this much by the operation\*. But

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\* He does not really gain as much as will be explained hereafter.



he cannot buy silver dollars at less than their legal value, in other words, there is no discount on them, and therefore he can gain nothing by buying wheat in this country and paying for it in silver. If he could, in some way, get hold of our silver dollars at their market value in England, he would gain just as much in buying wheat here as in buying it in India, but he cannot. He can, however, get hold of the silver rupees at their market value and so he buys them.

It may be worth while to explain, briefly, how he can get these. The English government sells them to him. But how does the government happen to have them? The government of India is a debtor to the English government for taxes and these are paid in silver. The payments are made into the English treasury in India, but instead of sending the silver to England and then reshipping it in payment of wheat, indigo and other commodities, bills of exchange, or "India council bills," as they are called, are sold by the English government in London, which are paid for in gold and which entitle the holders to silver rupees in India. In this way the English government is an enormous seller of silver at its market or reduced value that is, at the price which buyers of the bills will pay for them in gold and the amount of these transactions is contained in the following table. The imports of silver into India also are given :

* YEARS.*	Net imports of silver.	Amount of council bills sold.	YEARS.	Net imports of silver.	Amount of council bills. sold.
1874-75. . . . .	\$22,580,560	\$52,760,715	1883-84. . . . .	51,194,265	85,649,451
1875-76. . . . .	7,543,075	60,294,052	1884-85. . . . .	\$35,282,125	\$66,946,731
1876-77. . . . .	35,038,800	61,784,106	1885-86. . . . .	56,500,066	51,212,637
1877-78. . . . .	71,440,220	49,319,325	1886-87. . . . .	34,844,140	54,296,577
1878-79. . . . .	19,320,005	67,880,692	1887-88. . . . .	45,307,115	73,220,790
1879-80. . . . .	38,299,355	74,271,398	1888-89. . . . .	45,000,525	69,218,337
1880-81. . . . .	18,930,685	74,163,838	1889-90. . . . .	43,798,500	76,890,700
1881-82. . . . .	26,181,770	89,604,086	Total. . . . .	\$567,662,625	\$1,081,097,700
1882-83. . . . .	36,401,420	73,584,015	Annual average. .	35,478,914	67,568,606

Therefore, so long as the market value of silver is below its legal value, and silver rupees can be bought at their market value and exchanged for their legal value, and this cannot be done with a silver dollar, the English importer will buy wheat for which he can pay in rupees. On the other hand, to the extent that the market value of rupees rises does the margin of profits of the English importer decline. If they should appreciate in value and be worth as much as they were once the English importer's profits springing from their depreciation would cease.†

\*The English official year ends March 31.

† For those who desire a more complete explanation of the nature of the commercial transactions between Great Britain and India the following information is given. Indian merchants buy the produce of the country, cotton, wheat, tea, etc., and ship it to England and draw on banks or bankers, usually in London, for the amount. These bills of exchange are sold to the banks or bankers in India who deal in ex-

But the English importer or Indian exporter does not gain all this difference between the legal and market value of silver. If he did, the business would have been so remunerative as to attract a large number of persons into it, and the profits would have melted away. Either the consumer would have gained the benefits in lower prices, or the larger demand of purchasers would have stimulated prices. The following table shows that the producers have gained an advance:

change, and with the money thus obtained, consisting of rupees, the Indian merchants obtain the money to pay for their products. The produce in due time reaches England and is sold, and with the proceeds, or those from other sources, the bills above mentioned, which have been forwarded to the London banks, are discharged. It may be added that the London banks receive payment of their bills in gold, for which they originally gave silver as above described.

But goods are also shipped from England to India, and for these bills are drawn on India banks or bankers, payable in silver rupees. These bills are sold in London for gold which the shipper uses to pay for his exports. The bills are duly forwarded to India and are paid in rupees. It will now be seen that for the produce shipped, England really sends her own produce. The silver rupees obtained of the India bank by the India merchant and paid for it flows back into the India banks in payment of the English goods that are brought to the country. In like manner the gold paid to the exporter of English goods in Great Britain by the banks there comes back to the banks in payment of Indian produce exported to that country.

But the exports from India far exceed in value the imports, and consequently the bills in favor of England are smaller in amount than those in favor of India. The produce sent to India will not sell for enough to pay for all the bills of exchange drawn in London. Or, to put the matter another way, the produce sent to England is more than enough to pay for the produce sent by England to India, so that England becomes a debtor country. How can this balance be paid? Seemingly the thing to do would be to send silver enough to pay the excess of bills. But it so happens that the India government is a debtor to the English government for a large amount of taxes. These taxes are payable in gold in London. They are collected in India in silver. The government draws bills of exchange (or India Council bills as they are called) payable in tax receipts and sells them to whoever wants to liquidate his indebtedness in India. Thus the indebtedness of the Indian government to the home government is used to pay the private indebtedness of English merchants to those of India. In short the English merchants pay their Indian debts by making the Indian government a debtor for the amount and paying a similar sum to the home government. In this manner the commercial transactions are effected between the two countries without the transfer of a large amount of silver.

QUANTITIES, VALUES, AND AVERAGE EXPORT VALUES OF WHEAT EXPORTED  
FROM INDIA SINCE MAY 1, 1862.

	Quantities.		Values.		Average export values—	
					Per cwt.*	Per bushel.
Periods comprising the fiscal years—	<i>Cwts.</i>	<i>Winchester bushels.</i>	<i>Rupces.</i>	<i>Dollars.</i>	<i>Rupces.</i>	<i>Cents.</i>
1863-66 (4 years). . . . .	280,973	524,483	961,273	444,141	3.42	85
1867-71 (4 years). . . . .	225,399	420,745	842,063	384,052	3.74	91
1872-76 (5 years). . . . .	1,274,297	2,378,688	5,257,446	2,295,677	4.13	97
1877-81 (5 years). . . . .	4,532,476	8,460,623	19,507,502	7,788,378	4.30	92
1882-85 (5 years). . . . .	18,403,197	34,352,634	75,852,072	28,803,606	4.12	84
Fiscal years—						
1882. . . . .	19,901,005	37,148,543	86,200,618	33,607,035	4.33	90
1883. . . . .	14,193,763	26,495,024	60,888,136	23,602,068	4.29	89
1884. . . . .	21,001,412	39,202,636	88,958,112	33,971,324	4.24	87
1885. . . . .	15,850,881	29,588,311	63,160,182	23,914,340	3.98	81
1886. . . . .	21,068,924	39,328,658	80,053,311	28,923,261	3.80	74
1887. . . . .	22,263,624	41,558,765	86,259,856	29,425,825	3.87	71
1888. . . . .	13,538,169	25,271,249	55,623,733	18,475,423	4.11	73
1889. . . . .	17,611,408	32,874,628	75,232,794	24,112,110	4.27	73
1890. . . . .	13,802,209	25,764,123	57,926,147	18,798,772	4.20	73

Consequently a slight rise in the market value of silver sweeps away any profit there may have been in the operation, and this is why importers turned to this country for wheat supplies on the first advance in the market price of silver. This, then, became a more favorable market for buying wheat than India.

What, then, would be the effect of the free coinage of silver on the farming interests of the country? If the value of silver should appreciate, exports would increase, for the reason above given, that the profits now reaped by the discount on silver which the English and other importers of wheat are able to obtain, would diminish. As the discount melted away by the general increase in the value of silver, importers would turn more and more to this country. That this would be the effect of enhancing the value of silver can be easily proved. A year ago congress enacted a law for increasing the quantity of silver coinage, and its immediate effect was to enhance the price of silver.

\* Cwts. of 112 pounds. The quantities for the first period (the quadrennium 1863-66) are officially stated in imperial quarters and reduced to Winchester bushels at the rate of 8.25216 bushels per quarter; but, for the sake of uniformity, it is assumed that the bushels so obtained are, like those for the remainder of the time, comprised in the table, bushels of sixty pounds, and on that basis quarters have for those four years been reduced to their approximate equivalent in hundred weights.

MONTHS.	Highest.	Lowest.	Average price per ounce. British standard .925.	Equivalent value of a fine ounce with exchange at par \$4.8665.	Average monthly price at New York of exchange on London.	Equivalent value of a fine ounce, based on average monthly price and aver- age rate of exchange.	Average monthly New York price of fine bar silver.
1890.	<i>Pence.</i>	<i>Pence.</i>	<i>Pence.</i>				
January, . . . . .	44½	44½	44.502	\$0.97554	\$4.8612	\$0.97448	\$0.97510
February, . . . . .	44⅝	43⅝	44.042	.96545	4.8674	.66582	.96668
March, . . . . .	44⅝	43¼	43.908	.96251	4.8550	.96025	.96149
April, . . . . .	48	43¾	45.451	.99634	4.8722	.99747	1.00538
May, . . . . .	47½	46	46.971	1.02966	4.8596	1.02862	1.04890
June, . . . . .	49	46½	47.727	1.04623	4.8737	1.04780	1.05750
July, . . . . .	50½	47 <sup>9</sup> / <sub>16</sub>	49.201	1.07854	4.8852	1.08367	1.08942
August, . . . . .	54½	50¾	52.707	1.15540	4.8718	1.15643	1.16995
September, . . . . .	54⅝	50	53.123	1.16452	4.8504	1.15946	1.16560
October, . . . . .	51½	48½	49.708	1.08966	4.8599	1.08821	1.10315
November, . . . . .	49½	45	47.305	1.03698	4.8615	1.03404	1.04022
December, . . . . .	49½	47½	48.135	1.05518	4.8388	1.04939	1.05606
Average, . . . . .			47¾	1.04633+	4.8631—	1.04547	1.05329—

Forthwith the demand for American wheat increased, while the demand for wheat from India and Russia fell away. The following table of exports from the three countries is conclusive proof that the law operated in this manner :



## COMPARATIVE STATEMENT OF WHEAT EXPORTS.

YEARS.	Russia: Years ended January 12.		India: Down to 1866, years ended April 30; after that year, years ended March 31.		United States: Fiscal years ended June 30. (Wheat, including flour.)	
	Quantities.	Values.	Quantities	Values.	Quantities.	Values.
	<i>Bushels.</i>	<i>Dollars.</i>	<i>Winchester bushels.</i>	<i>Dollars.</i>	<i>Bushels.</i>	<i>Dollars.</i>
1852, . . . . .	14,795,597	9,627,549	. . . . .	. . . . .	16,691,235	14,424,352
1853, . . . . .	27,002,008	17,256,743	. . . . .	. . . . .	18,494,731	19,137,797
1854, . . . . .	42,989,395	32,412,490	. . . . .	. . . . .	28,148,595	40,121,616
1855, . . . . .	7,661,250	7,012,169	. . . . .	. . . . .	6,821,584	12,226,154
1856, . . . . .	2,004,867	2,025,437	. . . . .	802,540	25,708,007	44,390,809
1857, . . . . .	24,847,497	29,690,399	. . . . .	643,148	33,130,596	48,123,173
1858, . . . . .	1,938,583	2,417,659	. . . . .	662,939	26,487,041	28,390,388
1859, . . . . .	19,698,297	18,951,264	. . . . .	541,958	15,161,136	17,282,783
1860, . . . . .	25,076,385	25,296,942	. . . . .	524,829	17,213,133	19,525,211
1861, . . . . .	24,883,304	26,863,906	. . . . .	625,269	52,856,837	62,959,473
1862, . . . . .	30,392,545	30,300,792	. . . . .	676,617	61,699,737	69,091,013
1863, . . . . .	26,071,705	25,295,571	682,520	518,774	58,110,689	55,525,428
1864, . . . . .	24,795,978	22,437,324	520,563	364,608	41,468,447	37,435,887
1865, . . . . .	31,161,947	24,288,935	483,156	508,917	22,959,862	23,393,470
1866, . . . . .	36,396,943	27,424,880	411,692	384,264	16,494,353	19,763,312
1867, . . . . .	41,435,588	29,068,667	. . . . .	†353,460	12,646,941	16,671,409
1868, . . . . .	51,295,401	40,028,321	<i>Bush. of 60 lbs.</i> 558,852	462,329	26,323,014	39,244,318
1869, . . . . .	40,229,516	31,259,412	514,231	450,237	29,717,201	33,724,919
1870, . . . . .	37,920,756	39,149,552	145,988	149,788	53,900,780	57,312,313
1871, . . . . .	57,473,780	57,737,598	463,908	473,852	61,574,111	62,410,970
1872, . . . . .	68,651,262	74,400,517	1,189,251	1,076,497	38,995,755	51,415,879
1873, . . . . .	58,653,729	65,694,797	735,485	758,160	52,014,715	64,345,187
1874, . . . . .	41,436,869	52,287,607	3,277,781	3,675,564	91,510,398	118,965,893
1875, . . . . .	48,379,391	57,816,712	2,004,156	2,147,887	72,912,817	76,026,891
1876, . . . . .	56,752,240	66,180,325	4,686,767	3,820,276	72,782,926	83,667,061
1877, . . . . .	55,012,701	63,756,865	10,428,327	7,910,627	55,372,104	65,553,056
1878, . . . . .	51,568,603	54,529,932	11,896,580	11,761,457	90,167,960	119,333,978
1879, . . . . .	102,835,962	100,772,984	1,972,544	2,018,498	147,687,649	159,996,020
1880, . . . . .	82,918,717	90,730,360	4,109,495	4,391,613	180,304,181	225,879,502
1881, . . . . .	36,565,653	45,068,871	13,896,167	12,859,693	186,321,514	212,745,742
1882, . . . . .	48,972,597	60,700,753	37,148,543	33,607,035	121,892,389	149,304,775
1883, . . . . .	76,373,532	81,182,373	26,495,024	23,602,068	147,811,316	174,703,800
1884, . . . . .	83,780,050	81,424,177	39,202,636	33,971,324	111,534,182	126,166,374
1885, . . . . .	67,725,539	63,530,136	29,588,311	23,914,340	132,570,367	125,079,433
1886, . . . . .	91,756,992	71,027,535	39,328,658	28,923,261	94,565,794	88,705,670
1887, . . . . .	51,612,111	41,380,599	41,558,765	29,425,825	153,804,970	142,666,563
1888, . . . . .	77,796,105	60,520,113	25,271,249	18,475,423	119,625,344	111,019,178
1889, . . . . .	126,114,840	98,331,037	32,874,628	24,112,110	88,600,743	86,949,186
1890, . . . . .	107,250,883	95,116,657	25,764,123	18,798,772	109,430,476	102,312,074

† Eleven months.

If, therefore, the free coinage of silver would have the effect of enhancing its value, or of rendering it more nearly equivalent to gold, we can with confidence predict, based on past experience, that American exports of wheat and other products coming into competition with those of India and Russia would increase, while the demand for them from these countries would decline.

But suppose the effect of the measure was to lead the owners of gold to demand a premium therefor, what then? Silver, of course, would become the standard of value, gold would be practically an article of merchandise, although its circulation, to some extent, would continue. We do not believe, as some do, that it would entirely disappear, the owners would not permit it to remain idle long; either they would exchange it for securities, held in this country or abroad, or they would lend it at a premium. During the suspension of specie payments there was a very considerable quantity of gold in the country which was loaned and payable in the same metal; in fact, no large quantity of gold during that long period remained permanently in disuse. It circulated, but far more slowly than it had before; and this is precisely what would happen if gold should go to a premium again. There would be some contraction to the extent of the exchange of our securities in foreign countries therefor, but no further. The gold remaining would be used, but its circulation would be slower. This would be injurious to business, for the effect would be the same as the retirement of a considerable portion of our circulation. The quantity of circulating medium needed by a country is of hardly greater importance than the rapidity of its circulation; when money circulates slowly a much larger sum is needed than when the opposite conditions exist. This truth has been illustrated many times; consequently, if gold should go to a premium and it should circulate only through the medium of loans, and not in making ordinary payments, as is the case at the present time, its usefulness would be greatly diminished.

Silver, then, would be the standard of value. The value of wheat, grain and all other products would be measured by that metal. If the prices remained the same as before, then foreign importers of American products would acquire the same advantage in our markets, through their ability to obtain silver at its market value, that they now have in making purchases of the money of India. It will generally be admitted that when gold goes to a premium and the values of the two metals no longer correspond or remain equivalent to each other, the legal value of silver will immediately correspond with its market value, and consequently, the importer, after such a severance between the legal and market values occurred, could exchange his gold coin for our silver coin at the same advantage as he could exchange his gold coin for Indian coin. We think, therefore, that this measure would have the effect of stimulating the exports of wheat and other products from this country which now are

largely kept out of foreign markets by the products of India and Russia.

If prices of all kinds of products and other goods increased in value in this country in consequence of the debasement of silver as compared with gold then we are unable to say how this effect would retard or diminish our exports, inasmuch as the premium that gold would command would enable importers to buy silver, or to exchange their gold for silver, at relatively the same advantage as they can at the present time. What we see, therefore, clearly is this, that if prices advanced in the event that gold went to a premium, in other words, if the prices of other things corresponded in some degree at least to the premium on gold on the adoption of a silver standard, then our imports might not decline, but they certainly would not be stimulated by the change. Perhaps the export movement would continue to be as good as it is at the present time, but surely an advance in the prices of goods here, measured by a silver standard, would not, in even the slightest degree, facilitate or stimulate their exportation; fortunate indeed would we be if the present export continued.

It becomes important then to inquire whether the prices of anything would advance in consequence of the advance in the value of gold compared with silver, or whether they would remain on their present level. If silver was paid for exports the new supply would certainly tend to enhance prices here by reason of the increasing quantity of silver thus put into circulation. If silver was not paid for our exports, but chiefly other products, would the gold price be charged for them or a silver one, which would include the premium on gold? Let us take an illustration. Suppose an importer of coffee imports it, paying therefor twenty cents per pound in gold. Suppose he should sell it at twenty cents a pound in silver. When he converted this silver into gold, if the premium thereon was twenty per cent., he would have only sixteen cents instead of the twenty he paid in the beginning. It is very evident that, beside charging something for profits, he must also add the premium which gold commands in order to escape loss. In like manner on all other imported products, the importer must add the premium on gold to the price of them, or he would sustain a loss. Now the quantity of imported commodities used by all classes is very large, sugar, tea, coffee, spices, and many of the most common things which enter into daily consumption. Indeed, the quantity is so great that the effect of raising the price of them in order to cover the premium on gold, or the discount on silver, which is another way of stating the same thing, would undoubtedly result in a general advance of prices on all commodities. This would be the effect, therefore, of a premium on gold. Other prices would become adjusted to the new level; in the meantime there would be no little suffering and loss while prices were undergoing this readjustment.

But, it may be asked, does not the experience of India contradict this



deduction? we reply that it sustains it. The goods sent from England to India are not sold at the same rupee prices as formerly. On the other hand, the Manchester exporter of cottons demands and receives a sufficiently higher price in the silver money of India to cover the discount on silver.

The subject must be looked into a little further before concluding this branch of the inquiry. In consequence of the depreciation of silver in England, it is evident that the people of India prefer to send wheat, cotton and other products beside silver in payment of their imports, because there is not the same depreciation on them.

Is it not plain that if silver is depreciated in England, and India wheat sells for the old or depreciated price, while a higher price must be paid for imports, the decline in the value of silver is working injuriously to the people of India? Is it not plain that prices of wheat and other products exported must rise enough to equal the depreciation in the value to prevent a loss from these exchanges? On the other hand, if there is a rise to equal the depreciation then the depreciation may occasion no serious loss. But so long as the rise in India products is below the depreciation in silver, India is the loser. Her imported products cost more, those exported do not sell for enough more to cover the depreciation, therefore she must lose by these transactions. In like manner would this country be affected if the market value of silver coin fell below or parted company with the legal value, in other words, if gold went to a premium or silver was at a discount compared with gold.

Doubtless the stronger reason among farmers for desiring the free coinage of silver is that it will largely increase the supply of money, and this would have the effect, undoubtedly, of enhancing prices which the farmer believes would be highly beneficial to him. In the first place it may be questioned whether the free coinage of silver would largely stimulate the coining of that metal. It unquestionably would do so if gold did not go to a premium, and the silver coined would be worth far more than it would be uncoined. In other language, so long as the legal value of silver is much greater than its market value, and the legal value can be obtained for it by simply taking it to the mint and putting silver into the form of coin, it is certain that this movement would continue so long as the legal value exceeded its market value; but if the effect of this measure should be immediately to send gold to a premium, as is confidently predicted, and for which reasons will be speedily given, then the legal value over the market value would immediately disappear and there would be no particular reason for taking more silver to the mint to be coined; the anticipated profit would immediately vanish and silver would flow into other channels, or be put to other uses than that of money. If this reasoning be correct, the great fear of a flood of silver to this country in the event of a free coinage law is unfounded. So long as the legal value exceeded the market value, and every person was at



liberty to take his silver to the mint to be coined this movement would undoubtedly continue, but if the legal value immediately fell to the market value, then those owning silver abroad would gain nothing by bringing it to this country and putting it into the form of coins, and consequently it would stay where it is.

If gold went to a premium, which is the same thing as saying that if the legal value of silver speedily vanished and descended to its market value, no quantity of silver would come from abroad and the only increase in the quantity would be from the mines of our own country, but it may be questioned whether the silver produced here would all go to the mints under these conditions. We are at the present time coining nearly all the silver produced, no considerable supplies would come in any event, but very likely a smaller quantity even would go to the mint under a free coinage law so long as its legal value was not greater than its market value, and, therefore, the anticipated increase of the coinage would not take place. The farmers, therefore, who favor the measure on this ground, and which certainly is the more general one for their action would be disappointed. The increase would not come, and consequently the prices for their products would remain the same. We believe, therefore, that the farmers have nothing to gain from the measure, and possibly harm, unless a general rise in prices enabled those now in debt to discharge their indebtedness more easily.

#### THE NEED OF MORE MONEY.

Another cause from which the farmers complain is the insufficient supply of money. They think of other years when money was plentiful, and wheat was two dollars a bushel, and other farm products were worth relatively as much. They maintain that these were far better times than the present, and they desire their return. It is undoubtedly true that during war times, and for a few years afterwards, the farmers shared in the general prosperity of the country. It is unquestionably true that all of the farmers who were in debt were enormous gainers by the great advance in prices for they were able to discharge their indebtedness more easily. No one will question that if the farmers could get two dollars a bushel for their wheat instead of a dollar debt-paying would be easier than it is now. The farmers, east, west and everywhere, during war times and for several years afterward discharged their indebtedness with an unexpected ease and rapidity. These things cannot be gainsaid, and we wish to start with the fullest admission of all that the farmer can say in favor of the currency which was then adopted and put into general use. Having admitted all this we must look a little more closely into the matter.

In the first place the farmer overlooks the fact that not only was there a great increase in the currency, but there was a new and great demand for products of all kinds. This demand did not spring from the increase

in the currency, but from the unexampled need of the government. War is an enormous consumer, and as the war was of enormous proportions, the government demanded vast quantities of all kinds, and thus the farmer had such a market for his product as he had never had before. If there had been no increase in the currency, prices would have been enormously stimulated by reason of the governmental demand for all kinds of produce. It was not the currency which created the demand, it was the needs of the government. There may be times, indeed, when an increase of currency will have the effect of stimulating trade by creating a new demand, but this is rarely the case, and certainly was not so on this occasion.

When the war ceased the government demand fell away, and the farmers, in common with every other class of producers, began to suffer. Paper money had nothing to do with the cessation of the demand. It is true the government had ceased to make it, and after a few months retired a small quantity, but this had no appreciable effects on the markets. Producers of all kinds suffered because the demand for things fell away, for provisions of all kinds, woolen goods, in short, all the articles of life. When this happened then the suffering began, and there was no help for it. The wiser ones had all along seen that a day of reckoning must come when the demand would be diminished, and when prices, in consequence would shrink. The result of this cessation in the demand was the intensifying of competition, and the shrinkage of prices went on more rapidly than ever.

The farmers, therefore, since the new competition and diminution in prices, have been less able to pay their debts than heretofore, and accordingly they have suffered. The result was clearly foreseen in the beginning, and they were told a thousand times that the government would cease to be such an enormous consumer and that then prices must inevitably go down; that the thing for them to do was to pay their debts and to contract no more. Many of them were wise enough to heed this advice, but others did not and purchased new farms, and in many ways became more heavily indebted than ever, believing that the existing state of things would continue indefinitely. They have long since learned the truth of the situation.

It is proposed to issue an additional amount of paper money, believing that the effect will be to stimulate prices, and thereby enable the farmer, and all other debtors, to discharge their obligations more easily. What would be the effect of such an increase in the monetary supply? Let us keep two things distinctly in mind: first, that increased prices are one thing, and an increased demand for commodities quite another. It may be admitted that, if the currency was largely increased, prices would rise, but it does not follow that the demand for commodities would increase. The mere fact of issuing an additional amount of money has no necessary connection with a new demand for commodities. The



money would come forth from the government, we will suppose, in the way of paying its funded debt and ordinary obligations. The government would not issue this money in payment of grain or wheat or other products of the farmers. It does not want any of these things now, for the war is over. It must be admitted, therefore, that such an issue of money in the first place would not create a new demand for commodities of any kind through the persons to whom it was paid. It would trickle down through various strata of society, but, in its course, would create no new demand for anything. The persons to whom it was paid would exchange it for various things, but largely for new permanent investments, lands, buildings and the like. We do not understand, therefore, how the issuing of more money could have any effect in increasing the demand for commodities; but let us suppose that it would have a direct effect to increase prices. In that event the farmer who is in debt could pay more easily than he can at the present time. On the other hand, he must pay more for everything he buys, and so the gain on the one hand would be off-set by a disadvantage of a like kind on the other. Supposing, however, that he is anxious to discharge his debts, and that he will practice economy in order to pay them at the earliest possible moment, such a man would be a gainer by a rise in prices.

But would not another thing be just as likely to happen, namely, that with a rise in prices and a diminution in the rates of interest, in consequence of the large amount of money, he would become more heavily indebted than before. A low rate of interest is by no means a universal blessing. That depends on the use made of the money borrowed. If the borrower uses his money wisely, a low rate may indeed be very helpful to him, but if, on the other hand, it tempts him to run into debt when he would not otherwise, to engage in hazardous and speculative undertakings, then a low rate of interest may be a curse. It operates with many persons like credit at a store, and which the merchant so well understands. Many a person is so thoughtless as to buy things on credit, and which they would not buy if obliged to pay ready cash. The farmer is no exception to other classes in this regard. We do not think that he is more improvident, but simply like the ordinary man. A low rate of interest tempts him to buy other farms, build better houses than he can afford, and to indulge other desires which indeed it would be pleasant to gratify, but which he cannot afford to have. This would be precisely the operation of a low rate of interest with many of them. Could they borrow of the government at two per cent. would not their aggregate indebtedness rapidly increase? Who questions this result from the adoption of the plan?

To-day they are complaining of the huge mountain of debt which is hanging over them, especially in the western states. They complain that they have been evilly treated by the trust companies, and other lenders of money: that they have been obliged to pay exorbitant rates

and high commissions. Admitting all these things to be true, is it not reasonable to suppose that if they have borrowed so many millions on such unfavorable terms they would run into debt still more heavily if the rates were favorable? Therefore, we repeat, that low rates are not likely to prove any benefit to them in the end.

#### LOCAL MARKETS.

Another evil from which the farmers, in many places, are suffering is the control of the local meat markets by the great packing companies of the west. Formerly, the retail markets were quite independent of the wholesale ones, and purchased their supplies wherever they pleased. They depended largely on the farmers in their own vicinity for supplies of beef, mutton, poultry and other products, but now the leading packing houses are sending their own products to every retail market throughout the country, and this, of course, has the effect of closing them to the farmers in the vicinity of their location. If the packing companies should continue to extend their business and control the local markets everywhere, they will be able to dictate their own prices to producers. It is evident that under such a state of things the farmers are not likely to fare as well as they did under the old system.

But let us turn to the consumer. Does not this extension of the business, from a single center, mean the introduction of great economies and lower prices, and are not these a benefit to him? At first, all would readily answer, yes, but the question cannot be answered so easily. It is undoubtedly true that the consumer, in the first instance, is always benefited by lower prices, especially of the necessities of life; on the other hand, if he can get things at a less price is it not certain that some one, at the other end of the line, has been paid a less price for the cattle, or other raw material of the products thus purchased, and he, in turn, having less money to spend than formerly, is not able to employ labor at the old rates, or to pay as high rents, or in other ways is seriously affected by the change. In other words, his prosperity is somewhat diminished and, therefore, the seeming gain to the consumer in the first instance is off-set by the loss to the other class in the field of labor or production.

On the other hand, if these diminished prices to the consumer were without such consequences; if the packing houses, for example, can furnish products at a lower price, by reason of greater economies introduced into their business, and without affecting the price of any class of labor, or lessening the old price paid for cattle, then the change is likely to prove a good one, and a gain to all concerned.

It will be seen, however, that these changes must result in harm somewhere. Certain classes are eliminated from production, markets, or avenues are closed to some producers who formerly enjoyed them, and



thus they must lose, inevitably, in the end; there can be no escape from this. But it will be urged that their loss, while great, is by no means equal to the gain to the consuming class. That such a loss must arise from every great change in the methods of production, and exchange is unquestioned, and the consequences are those above given. These changes are going on everywhere, and they are of the utmost importance. What the farmers can do in view of the impending destruction of their markets will soon be considered.

### THE TARIFF.

Such are some of the causes which have produced the changes in the value of lands and the prosperity of the farmers. But we have not exhausted the catalogue, and we have left out of sight one of the causes concerning which more has been said in late years perhaps than of any other—the tariff. The reasons for not considering the subject may be briefly stated. The first is, that an incomplete investigation would be deceptive, and we have not the means for making a complete one. The free-trader maintains that when a tariff is imposed on cotton, and woolen goods, hardware and the like, that the farmer must pay a higher price for them, at least in the beginning, if not always. The protectionist farmer maintains that in consequence of making these things at home more persons are employed in the country and, therefore, that a larger market exists for his produce and a higher price, is obtained, and consequently that the larger price paid for the things purchased, through the operation of the tariff, is off-set by the higher price he gets in the end for the things he sells. Both persons are right in their contention. Is it not clear then, in order to answer this question fairly, all the effects on all classes must be ascertained, and not until these are known can the balance between the advantages and disadvantages be struck. And so long as the one-sided or few-sided method of investigation is pursued, the question will remain unanswered.

For the most part the inquiry has been limited to looking at the subject from one or two sides only and so, while those who conducted them may have been correct, from their point of view, they have reached erroneous conclusions because of their failure to look at the subject all around.

The free-trader maintains that a complete investigation of the subject would disclose that the farmer is suffering from the existence of the tariff system. The protectionist is equally confident that such an investigation would result in a victorious conclusion for the protective policy. Since both sides are equally confident of an appeal to all the facts, why should not the government undertake an elaborate investigation, as it has all the means for making it.

Two or three considerations, however, may be perhaps profitably added. The first is, that whatever may be the truth concerning the

desirability of maintaining the system as opposed to free importations, it certainly is unwise to attempt any system of state protection as opposed to the interests of the people in other states. The wisdom of the constitutional interstate commerce regulation will hardly be questioned. If this provision of the organic law did not exist it is quite probable that the states, in too many cases, would have pursued a very narrow policy leading to jealousy and discord. The application of this principle should be extended, because it tends to national union, to diminish the friction between the states, for the same reason the states should be very slow in attempting to establish the policy of promoting an industry at the sacrifice of such industry in some other state, by means of bounties or by any unusual public advantages. This is a game at which all the states can play, and it requires neither statesmanship nor wisdom to indulge in retaliation. Again and again have the states attempted to over-reach each other in their treatment of the insurance companies. They have sought to protect home insurance companies at the sacrifice of companies in other states by various restrictions and exactions. Retaliation, however, has been the inevitable result; and in the end no one has been the gainer by such an unwise and narrow-sighted policy. Suppose the manufacturers or the merchants should seek for state aid in the way of bounties or the remission of taxes in order to reap advantages over others engaged in similar pursuits outside the state, could not the farmers say, with as much reason, we are suffering in consequence of the great competition in western grain and in cattle and therefore something must be done for us; all the people of the state ought to be taxed to pay our transportation bills or our farming implements, or we should be absolved from taxation, or in some other way relief ought to be granted sufficient to overcome the advantages now possessed by the western wheat grower and cattle raiser. Not long ago some fish dealers in Newcastle, England, appeared before a parliamentary commission to complain of the high rates that were charged on fish for transporting them to London. Their remedy was lower rates, or else that the state should pay the rates and transport their fish for nothing. Is not this proposition quite as reasonable as that for the canal? In other words, if a state is to go into the protective business for the benefit of any class in the state as against others engaged in that business in other states there should be no discrimination, and the principle should be applied to all classes needing protection whatever may be their business. It cannot be successfully maintained that the manufacturer should be favored at the expense of the farmer or the miner. Neither by constitution nor by popular opinion can such a contention be successfully maintained.

Nor should congress favor one state or section at the detriment of another. We have already shown that the interstate commerce bill has had this effect of injuring the eastern railroad companies and farmers, and benefiting the western shippers of produce.



## MODES OF RELIEF.

In trying to find relief the subject may be considered from several sides: (1) Can the farmers get a larger price for their products? If they can, and by artificial methods, we are certain that the increase cannot be long continued. By artificial methods we mean those which consist in inflating the currency, or by increasing its quantity in any considerable degree by the addition of gold or silver; and the reasons why such methods will fail has been often given, namely, the increase will become general; it will spread over all commodities; the producers of any class of them will not be the exclusive gainers. If any class could thus gain exclusively by the increase, and the farmers were sure that this would be their happy lot, then they might with reason seek to obtain an increase, but since nothing is more certain than that the increase will flow over all commodities alike, no class can gain anything except during the period of re-adjustment. It may be indeed that some class of producers will feel the increase more quickly than others, but after a short time, comparatively, prices will rise to a new level, just as the waters of a swollen river quickly spread as soon as they reach a larger surface. No class of producers, we are confident, are strong enough to prevent a general diffusion of an increase of the currency, or of its effects from expanding everywhere. If the farmer, for example, was strong enough to confine the effects to his own products, leaving the price of all other products at their present lower level, they would surely gain by such a change, but they are not powerful enough to accomplish such a result. It is certain, therefore, that no gain can be expected from an increase in the quantity of either paper money or of silver, or any other metal. The effect of the increase will be general, except that a special gain may perhaps be experienced by the debtor class as previously explained.

Neither is the prospect bright for enlarging the export trade. On the other hand, the facts point more and more clearly to an increase of wheat and other grains by Russia, India and the central South American countries and Asia Minor. These countries are rapidly increasing their production as well as their facilities for bringing their products to market. Hitherto they have suffered in both regards, but Russia, India and the Argentine Confederation especially are rapidly extending their railway facilities and stimulating the growth and exportation of farm products.

It may be that higher prices will eventually be paid in consequence of the more general settlement of our country, especially when more villages and cities exist in the west, nearer the center of grain and cattle raising. The effect of these new and more important markets nearer the place of supplies will be to leave the older markets in the east to be supplied by the producers nearer to them. But this effect from the growth of the country will not be immediate, and the brief mention of it will suffice.

(2) We may next inquire, what are the prospects of relief in making purchases at lower prices? The farmer is a consumer as well as a producer, and his prosperity depends quite as much on buying at a better advantage as in selling his products at a better advantage. We have already shown that he is suffering somewhat from high prices, occasioned by the creation of recent monopolies. These we may confidently predict will end at no distant date, and the farmer in common with all other consumers, is likely to purchase the things now needed, furnished by them, at lower prices. The prices of other things too are likely to be less, for the tendency of the time is to give the consumer some of the benefits at least of lower prices arising from the invention and introduction of the labor-saving machinery, and in general from the more economical processes introduced into production. We may indeed fairly assume that producers in all such cases will seek to retain as large a share of the profits arising from the introduction of these economies as possible, but they cannot retain all. Competition is ever alert, the selfishness of one man is matched by the selfishness of another, and thus it will happen in the future as it has always happened in the past, that the gains arising in the first instance to the producer from the introduction of more economical processes, whereby the cost of production is cheapened, will flow onward and reach the consumer in the end.

Another way in which the farmers can increase their profits is to sell more of their products directly themselves. This they are beginning to do with respect to milk, butter and some other products; and the possibilities for them in this direction are great. Surely no great amount of capital is needed on their part to do these things, for they already have the products to sell, which is the chief element in the business. If they were required to sell on credit there would be no difficulty in these days for any well-organized association to obtain abundant capital if it was needed.

(3) Another direction in which the farmers should look for relief is in a lower cost of production. We have seen already what remarkable economies the transportation companies have effected in this regard. In nearly every kind of manufacturing similar economies have been wrought during the last fifty years. The farmers seem to be very slow in introducing them, perhaps the nature of his work does not admit of their introduction to a similar degree; nevertheless labor-saving machines have been very generally introduced and the saving effected by them is, very great. An illustration is perhaps worth giving.

The following description of the use of labor-saving machinery in California is taken from the *San Francisco Chronicle*, of late years:

Having demonstrated that steam made harvesting far less expensive than it would otherwise be, the next step was to utilize the same motive power in seeding or in harvesting. This was found feasible, and for



several years the steam plows have been at work to great advantage. Ordinarily five gangs of four plows each are attached to the engine, each being attached at the side or immediately to the rear of the others. The plows used are ten inches in width, and the furrows are made at least five inches deep. Each separate gang is attached to the engine with a chain, while they are also fastened to each other laterally by chains, so that they cannot spread apart, and none of the surface of the field is missed. The machine is run night and day, no stop being made for any purpose.

Two gangs of men are employed, five men to each gang. Three are required to manage the engine and the plows and two to haul water and straw for fuel. No stop is made to supply these articles, the wagons containing them being driven alongside and unloaded while still in motion. At night two locomotive headlights are used, one in front and the other in the rear, so that the engineer may at all times watch the plows. A "driver" sits in front and governs the course of the machine by a tiller attached to two small guide wheels. When the soil is in passable condition to work, from seventy to eighty acres are put in daily, though when the condition is exactly right seven gangs instead of five are operated and a correspondingly greater amount seeded.

Besides plowing the land, each gang has a seeder and harrow attached, so that at a single operation the entire process of planting is completed. In addition, whenever the surface is so uneven as to need leveling an apparatus is attached which does this work perfectly and at the same time the seeding and harrowing is accomplished.

From accounts carefully kept for a series of years the result of the use of steam in seeding and harvesting wheat has been that the expense for putting in the crops upon each one hundred acres has averaged \$35.

The seed cost \$60 and the harvesting \$30. The entire expense for the area mentioned has averaged as follows:

Plowing and seeding, . . . . .	\$35 00
Seed, . . . . .	60 00
Harvesting, . . . . .	30 00
Sacks, . . . . .	56 00
Interest on machinery, . . . . .	17 50
Interest on cost of land, . . . . .	30 00
Total, . . . . .	<u>\$228 50</u>

In other ways the cost of production may be lessened. It will not be denied that the farmers are working far less themselves and either are hiring more labor or are employing more machinery than they did a few years ago. This clearly appears from their own testimony published in our Report of last year. Of course, by diminishing the quantity of labor performed by themselves and by employing more, unless a saving equally large is effected by the use of machinery, the cost of production is greatly increased, add to this larger family expenses and all can readily understand why the farmer is suffering to-day, and at the same time, how the cost of production can be diminished by reversing the conditions already mentioned. If it be said that he is not living too well; that this is his own affair, we do not in the least dispute what he says, or find the smallest fault with him; we are simply explaining why things exist and the remedy for them. We repeat, there-

fore, that if farmers worked as much as they did formerly and diminished their expenditures for other labor, which would, of course, be the necessary result of doing more of their own work, and lived as plainly and economically as they once did, the cost of production would be greatly lessened, and the margin of profit unquestionably enlarged.

Another remedy is to diversify production. Many of the farmers are beginning to learn this and are making noteworthy experiments. Doubtless they will learn within a few years how to increase their profits by changes of this nature. One of the things learned, for example, in the west is that instead of selling their grain the profits are much greater by converting it into higher grades of products and selling them. A bushel of potatoes, which sells in Iowa at 30 cents a bushel, can be converted into twenty-three pounds of starch, which will sell at \$1.62; or into twelve pounds and a half of pork which is worth \$1.25. A good illustration of profits arising from varying a crop is a recent experiment in California. The vineyards near Los Angeles, were becoming unprofitable, and the owner tried the experiment of raising potatoes, which was highly successful.\*

There are many evidences of an awakening on this subject all over the state, and in many other parts of the country, and in a few years we are likely to hear good results from some of these new efforts to swell the profits of farmers. In the old world the same state of things exist, and in England especially, where the wheat lands have become highly unprofitable, the occupiers are putting them to other uses, and with gratifying results.

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\*A correspondent of the *New York Tribune*, from Los Angeles, says: The results would make a Kansas or an Illinois farmer envious, and drive a New England farmer crazy. Potatoes have yielded from \$500 to \$1,500 an acre, and so on with nearly all vegetables. Ranchers who, last winter, shipped peas, and lettuce, and string beans, and such things east, received such large prices that it would be useless to write the figures down; they would only be smiled at as details of a characteristic California story. But these things are written about and talked of, and the consequence is that everything indicates an unparalleled amount of immigration this winter. When John writes back to his old folks that his last strawberry or green pea crop returned him \$2,000, lots of trunks will be packed at once to make the journey to the Sunset Land. For a year the farmers of Southern California have enjoyed wonderful prosperity, and the result is that Los Angeles is to-day the busiest city of its size in the country.

## NUMBER AND ACREAGE OF FARMS IN BERKS COUNTY OCCUPIED BY LAND OWNERS AND TENANTS.

TOWNSHIPS.	Between 1 and 10 acres occupied by		Between 10 and 25 acres occupied by		Between 25 and 50 acres occupied by		Between 50 and 100 acres occupied by		Over 200 acres occupied by		Total number of farms occupied by		Total acreage of farms occupied by	
	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.
Albany, . . . . .	28	30	26	20	27	14	47	11	57	9	135	93	15,073	8,765
Amity, . . . . .	31	8	19	15	36	9	33	17	19	15	140	64	7,209	3,861
Alsace, . . . . .	30	29	40	18	32	13	19	8	4	5	125	74	4,107	2,433
Lower Alsace, . . . . .	30	51	17	30	8	16	11	11	2	34	68	109	1,765	2,290
Bern, . . . . .	46	38	23	22	21	12	22	26	10	7	129	135	4,816	7,982
Upper Bern, . . . . .	43	49	42	15	57	4	64	6	51	6	263	87	16,069	6,409
Brecknock, . . . . .	13	24	20	8	37	13	40	11	23	2	134	59	7,843	2,289
Bethel, . . . . .	52	62	64	58	35	36	53	32	48	21	256	213	14,339	10,418
Colebrookdale, . . . . .	32	39	23	11	14	15	12	21	4	6	85	92	2,315	3,433
Caernarvon, . . . . .	7	6	30	10	20	11	19	8	10	8	88	45	4,493	3,176
Cunru, . . . . .	97	42	82	47	50	37	34	37	15	20	278	183	7,933	7,669
Center, . . . . .	11	4	29	9	35	8	34	18	33	24	142	64	8,494	5,263
Douglass, . . . . .	8	8	17	23	15	18	20	12	10	7	72	68	4,493	2,944
District, . . . . .	3	4	12	8	25	20	18	14	7	12	65	59	3,392	3,463
Earl, . . . . .	21	67	37	71	39	26	20	11	3	6	120	181	3,948	4,117
Exeter, . . . . .	81	33	63	35	60	27	32	20	18	29	255	145	8,392	7,064
Greenwich, . . . . .	28	30	37	15	30	19	50	15	50	15	199	95	13,450	4,637
Heidelberg, . . . . .	39	72	14	19	9	6	5	11	10	21	78	133	3,353	5,237
North Heidelberg, . . . . .	24	11	20	12	13	8	18	11	13	22	88	65	4,076	4,553
Lower Heidelberg, . . . . .	114	69	52	26	49	23	35	28	23	29	276	179	9,226	8,615
Hereford, . . . . .	15	28	32	22	33	9	26	9	24	9	130	77	7,326	2,655
Jefferson, . . . . .	18	14	12	12	5	12	14	32	7	32	56	102	2,603	7,237

## NUMBER AND ACREAGE OF FARMS IN BERKS COUNTY—Continued.

TOWNSHIPS.	Between 1 and 10 acres occupied by		Between 10 and 25 acres occupied by		Between 25 and 50 acres occupied by		Between 50 and 100 acres occupied by		Between 100 and 200 acres occupied by		Over 200 acres occupied by		Total number of farms occupied by		Total acreage of farms occupied by	
	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.
Longwamp, . . . . .	69	31	65	60	27	35	28	25	16	13	. . . . .	1	205	165	6,612	6,133
Maldenecreek, . . . . .	26	27	14	19	20	8	18	13	7	26	1	1	86	94	3,586	5,522
Marion, . . . . .	21	10	23	11	8	10	8	25	10	26	. . . . .	4	70	86	2,588	6,991
Maxatawny, . . . . .	24	25	26	29	16	11	21	22	31	53	1	2	119	142	6,432	10,407
Muhlenberg, . . . . .	28	15	31	17	15	11	11	19	6	19	2	1	93	82	3,319	4,721
Oley, . . . . .	14	14	23	10	22	26	35	13	31	26	3	. . . . .	128	89	8,997	6,114
Ontelaunee, . . . . .	4	2	13	7	5	7	6	14	11	13	. . . . .	1	39	44	2,256	3,304
Penn, . . . . .	3	7	19	13	21	13	29	8	20	30	1	1	93	72	6,198	5,342
Perry, . . . . .	10	4	33	4	33	7	30	13	19	16	3	1	128	45	7,483	3,737
Pike, . . . . .	3	5	25	17	38	18	24	12	9	6	1	. . . . .	100	58	5,157	2,870
Richmond, . . . . .	23	14	52	30	33	7	33	14	23	26	. . . . .	1	164	92	7,190	5,857
Robeson, . . . . .	13	6	56	15	69	24	69	30	20	13	2	3	229	91	11,771	8,492
Ruscomb manor, . . . . .	9	6	40	27	44	36	16	24	1	9	. . . . .	. . . . .	110	102	3,653	4,923
Rockland, . . . . .	20	10	47	36	38	30	36	10	11	9	. . . . .	. . . . .	152	95	6,223	3,533
Spring, . . . . .	21	13	55	26	56	8	44	10	39	16	1	2	216	75	11,552	4,075
Tulpehoeken, . . . . .	13	2	27	7	22	7	26	20	32	22	3	2	123	60	8,022	4,442
Upper Tulpehoeken, . . . . .	3	4	30	7	33	5	34	2	34	6	1	2	135	26	9,005	2,931
Tilden, . . . . .	13	10	22	11	33	2	29	4	23	3	4	3	124	33	7,687	2,947
Union, . . . . .	32	6	42	9	27	6	27	11	16	10	3	2	147	44	11,536	4,203
Washington, . . . . .	15	19	54	19	38	7	27	13	17	2	. . . . .	. . . . .	151	60	6,796	1,785
Windsor, . . . . .	9	25	15	28	14	15	22	12	21	11	2	4	83	95	4,711	7,702



## NUMBER AND ACREAGE OF FARMS IN HUNTINGDON COUNTY OCCUPIED BY OWNERS AND BY TENANTS.

TOWNSHIPS.	Between 1 and 10 acres occupied by		Between 10 and 25 acres occupied by		Between 25 and 50 acres occupied by		Between 50 and 100 acres occupied by		Between 100 and 200 acres occupied by		Over 200 acres occupied by		Total number of farms occupied by		Total acreage of farms occupied by	
	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.
Smithfield.	5	...	4	...	1	...	3	...	8	...	7	...	28	...	3,692	...
West.	11	...	6	...	3	...	15	...	35	...	18	...	88	...	16,219	...
Warrior's Mark.	13	...	13	...	21	...	49	...	57	...	17	...	170	...	17,908	...
Waiker.	10	...	3	...	7	...	10	...	36	...	16	...	82	...	10,929	...
Union.	11	...	14	...	23	...	28	...	58	...	21	...	155	...	19,625	...
Tell.	7	...	15	...	18	...	49	...	56	...	24	...	169	...	20,408	...
Tod.	9	...	13	...	17	...	34	...	70	...	43	...	186	...	28,425	...
Springfield.	10	...	8	...	14	...	55	...	47	...	8	...	142	...	14,192	...
Penn.	19	...	15	...	13	...	30	...	44	...	33	...	145	...	19,682	...
Shirley.	15	...	26	...	29	...	52	...	63	...	40	...	225	...	33,090	...
Porter.	25	...	7	...	14	...	20	...	34	...	36	...	136	...	19,777	...
Cass.	24	...	8	...	20	...	39	...	51	...	27	...	169	...	20,241	...
Clay.	12	...	10	...	28	...	64	...	52	...	8	...	174	...	15,947	...
Cromwell.	24	...	16	...	21	...	41	...	71	...	43	...	216	...	28,698	...
Carbon.	12	...	11	...	22	...	31	...	31	...	39	...	146	...	22,694	...
Brady.	17	...	10	...	24	...	25	...	45	...	28	...	149	...	18,697	...
Barree.	1	...	9	...	11	...	9	...	37	...	20	...	87	...	12,494	...
Onelda.	6	...	10	...	4	...	13	...	23	...	19	...	75	...	10,736	...
Miller.	1	...	5	...	10	...	12	...	32	...	19	...	79	...	12,465	...
Morris.	7	...	3	...	2	...	11	...	24	...	13	...	60	...	8,758	...
Logan.	6	...	4	...	5	...	12	...	35	...	17	...	79	...	13,316	...

NUMBER AND ACREAGE OF FAAMS IN HUNTINGDON COUNTY--Continued.

TOWNSHIPS.	Between 1 and 10 acres occupied by		Between 10 and 25 acres occupied by		Between 25 and 50 acres occupied by		Between 50 and 100 acres occupied by		Between 100 and 200 acres occupied by		Over 200 acres occupied by		Total number of farms occupied by		Total acreage of farms occupied by	
	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.
Lincoln.	6	...	5	...	16	...	22	...	32	...	16	...	97	...	11,113	...
Jackson.	3	...	8	...	14	...	28	...	42	...	28	...	113	...	17,260	...
Juniata.	4	...	2	...	6	...	20	...	33	...	15	...	80	...	10,807	...
Hopewell.	12	...	10	...	6	...	15	...	35	...	11	...	89	...	9,285	...
Henderson.	11	...	5	...	19	...	30	...	54	...	9	...	128	...	13,262	...
Franklin.	5	...	9	...	7	...	13	...	37	...	35	...	106	...	17,682	...
Dublin.	5	...	19	...	11	...	44	...	51	...	30	...	160	...	21,243	...

NUMBER AND ACREAGE OF FARMS IN CAMBRIA COUNTY OCCUPIED BY OWNERS AND TENANTS.

Jackson.	9	...	17	...	57	...	77	...	40	...	14	...	214	...	18,926	...
Lower Yoder.	91	...	18	...	19	...	11	...	13	...	3	...	155	...	5,012	...
Dean.	5	...	3	...	7	...	21	...	8	...	13	...	57	...	8,993	...
East Taylor.	32	...	6	...	19	...	30	...	4	...	1	...	92	...	4,147	...
Reade.	44	...	24	...	57	...	59	...	17	...	19	...	220	...	21,113	...
Upper Yoder.	45	...	18	...	18	...	28	...	24	...	6	...	139	...	9,739	...
White.	23	...	10	...	24	...	36	...	21	...	6	...	120	...	8,299	...
Elder.	21	...	14	...	24	...	68	...	27	...	4	...	158	...	11,305	...
Munster.	2	...	4	...	21	...	52	...	25	...	3	...	107	...	8,957	...
Washington.	54	...	23	...	38	...	41	...	25	...	16	...	197	...	14,852	...
Susquehanna.	20	...	26	...	59	...	103	...	47	...	17	...	272	...	22,581	...

	30	6	8	14	30	11	11	104	9,200
Chest,				15	42	23		96	10,328
Allegheny,	17	21		45	101	45		235	17,813
Stony Creek,	65	20		18	3	8		115	2,906
Gallitzin,	31	20		17	20	18		118	9,130
Richland,	21	28		51	67	33		206	13,397
Black Lick,	8	5		19	57	45		147	15,712
Conemaugh,	29	14		16	23	16		100	5,430
West Taylor,	34	25		14	27	17		118	6,089
Croyle,	25	24		37	46	33		173	11,533
Summerhill,	15	20		42	56	27		172	13,225
Cambria,	54	26		27	95	89		311	27,701
Clearfield,	21	30		59	93	28		236	15,584
Adams,	10	23		58	74	56		231	19,388
Barr,	8	13		64	98	29		223	17,553
Carroll,	29	17		40	106	65		267	23,251

NUMBER AND ACREAGE OF FARMS IN SOMERSET COUNTY OCCUPIED BY TENANTS AND OWNERS.

Somerset No. 2,	33	26	46	53	40	4	202	13,742	
Larimer,	24	10	11	18	35	12	110	12,638	
Addison,	36	30	23	44	75	64	272	38,109	
Stony Creek,	101	60	60	59	90	49	419	36,013	
Brothers Valley,	52	41	34	44	111	49	331	35,791	
Shade,	33	30	50	100	97	51	369	42,288	
Somerset No. 1,	115	85	93	84	129	36	552	40,026	
Southampton,	18	15	25	48	53	19	178	19,155	
Elk Lick,	54	31	24	42	59	65	275	34,997	
Quemahoning,	39	36	36	50	73	17	251	21,629	
Black,	18	21	14	21	49	41	164	23,967	

## NUMBER AND ACREAGE OF FARMS IN SOMERSET COUNTY—Continued.

TOWNSHIPS.	Between 1 and 10 acres occupied by		Between 10 and 25 acres occupied by		Between 25 and 50 acres occupied by		Between 50 and 100 acres occupied by		Between 100 and 200 acres occupied by		Over 200 acres occupied by		Total number of farms occupied by		Total acreage of farms occupied by	
	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.
Allegheny No. 2, . . . . .	4	..	2	..	5	..	7	..	11	..	7	..	36	..	4,732	..
Northampton, . . . . .	10	..	11	..	27	..	47	..	62	..	24	..	181	..	21,118	..
Milford, . . . . .	46	..	14	..	23	..	30	..	61	..	22	..	196	..	18,087	..
Ogle, . . . . .	4	..	8	..	11	..	13	..	15	..	40	..	91	..	19,566	..
Lower Turkeyfoot, . . . . .	27	..	14	..	15	..	30	..	40	..	30	..	156	..	20,165	..
Middlecreek, . . . . .	22	..	11	..	27	..	30	..	51	..	15	..	156	..	15,548	..
Allegheny No. 1, . . . . .	14	..	14	..	29	..	57	..	73	..	45	..	232	..	29,543	..
Paint, . . . . .	23	..	30	..	36	..	58	..	69	..	18	..	234	..	21,634	..
Jenner, . . . . .	30	..	34	..	42	..	84	..	120	..	36	..	346	..	37,035	..
Summit, . . . . .	100	..	32	..	38	..	38	..	64	..	39	..	311	..	27,314	..
Upper Turkeyfoot, . . . . .	25	..	16	..	24	..	37	..	62	..	25	..	189	..	21,014	..
Greenville, . . . . .	16	..	11	..	14	..	30	..	28	..	24	..	123	..	15,489	..
Jefferson, . . . . .	24	..	23	..	27	..	42	..	52	..	29	..	197	..	21,472	..
Conemaugh, . . . . .	22	..	23	..	42	..	60	..	80	..	25	..	252	..	26,347	..

## NUMBER AND ACREAGE OF FARMS IN INDIANA COUNTY OCCUPIED BY OWNERS AND BY TENANTS.

Green, . . . . .	30	..	31	..	74	..	137	..	85	..	17	..	374	..	31,808	..
Grant, . . . . .	27	..	34	..	73	..	75	..	35	..	3	..	247	..	15,436	..
Centre, . . . . .	18	..	23	..	37	..	65	..	89	..	16	..	248	..	24,017	..
Cherry Hill, . . . . .	35	..	34	..	68	..	143	..	95	..	4	..	379	..	29,300	..



Canoe. . . . .	17	. . . . .	25	. . . . .	51	. . . . .	73	. . . . .	43	. . . . .	8	. . . . .	217	. . . . .	17,029	. . . . .
Conemaugh. . . . .	16	. . . . .	15	. . . . .	25	. . . . .	63	. . . . .	69	. . . . .	12	. . . . .	200	. . . . .	21,059	. . . . .
Banks. . . . .	16	. . . . .	18	. . . . .	51	. . . . .	84	. . . . .	67	. . . . .	8	. . . . .	244	. . . . .	21,065	. . . . .
Buffington. . . . .	11	. . . . .	11	. . . . .	30	. . . . .	75	. . . . .	47	. . . . .	9	. . . . .	183	. . . . .	15,545	. . . . .
Brush Valley. . . . .	20	. . . . .	28	. . . . .	68	. . . . .	87	. . . . .	83	. . . . .	12	. . . . .	298	. . . . .	24,508	. . . . .
Burrell. . . . .	41	. . . . .	23	. . . . .	20	. . . . .	51	. . . . .	49	. . . . .	6	. . . . .	196	. . . . .	15,015	. . . . .
Blacklick. . . . .	21	. . . . .	13	. . . . .	17	. . . . .	42	. . . . .	71	. . . . .	10	. . . . .	174	. . . . .	16,428	. . . . .
Washington. . . . .	18	. . . . .	29	. . . . .	70	. . . . .	118	. . . . .	57	. . . . .	3	. . . . .	295	. . . . .	22,007	. . . . .
Rayne. . . . .	22	. . . . .	23	. . . . .	78	. . . . .	123	. . . . .	85	. . . . .	5	. . . . .	342	. . . . .	27,330	. . . . .
Pine. . . . .	17	. . . . .	26	. . . . .	63	. . . . .	94	. . . . .	32	. . . . .	7	. . . . .	245	. . . . .	17,209	. . . . .
Montgomery. . . . .	30	. . . . .	24	. . . . .	55	. . . . .	87	. . . . .	50	. . . . .	2	. . . . .	248	. . . . .	18,429	. . . . .
South Mahoning. . . . .	15	. . . . .	34	. . . . .	37	. . . . .	103	. . . . .	43	. . . . .	4	. . . . .	236	. . . . .	17,361	. . . . .
North Mahoning. . . . .	14	. . . . .	7	. . . . .	32	. . . . .	74	. . . . .	68	. . . . .	3	. . . . .	198	. . . . .	17,250	. . . . .
West Mahoning. . . . .	24	. . . . .	23	. . . . .	42	. . . . .	64	. . . . .	65	. . . . .	3	. . . . .	221	. . . . .	17,151	. . . . .
East Mahoning. . . . .	15	. . . . .	17	. . . . .	49	. . . . .	110	. . . . .	43	. . . . .	4	. . . . .	238	. . . . .	18,342	. . . . .
West Wheatfield. . . . .	28	. . . . .	30	. . . . .	60	. . . . .	87	. . . . .	48	. . . . .	7	. . . . .	260	. . . . .	19,161	. . . . .
East Wheatfield. . . . .	15	. . . . .	21	. . . . .	31	. . . . .	53	. . . . .	57	. . . . .	10	. . . . .	193	. . . . .	17,303	. . . . .
White. . . . .	33	. . . . .	28	. . . . .	52	. . . . .	84	. . . . .	94	. . . . .	10	. . . . .	301	. . . . .	24,963	. . . . .
Young. . . . .	22	. . . . .	10	. . . . .	26	. . . . .	79	. . . . .	74	. . . . .	10	. . . . .	221	. . . . .	20,758	. . . . .
Armstrong. . . . .	29	. . . . .	23	. . . . .	34	. . . . .	99	. . . . .	86	. . . . .	6	. . . . .	277	. . . . .	23,018	. . . . .

NUMBER AND ACREAGE OF FARMS IN BEDFORD COUNTY OCCUPIED BY OWNERS AND BY TENANTS.

Broad Top. . . . .	37	. . . . .	32	. . . . .	28	. . . . .	41	. . . . .	46	. . . . .	58	. . . . .	242	. . . . .	32,249	. . . . .
Bloomfield. . . . .	40	. . . . .	21	. . . . .	19	. . . . .	35	. . . . .	35	. . . . .	12	. . . . .	162	. . . . .	12,441	. . . . .
Cumberland Valley. . . . .	10	. . . . .	6	. . . . .	19	. . . . .	34	. . . . .	63	. . . . .	69	. . . . .	201	. . . . .	36,391	. . . . .
Coderaln. . . . .	31	. . . . .	19	. . . . .	16	. . . . .	39	. . . . .	58	. . . . .	38	. . . . .	201	. . . . .	21,056	. . . . .

## NUMBER AND ACREAGE OF FARMS IN BEDFORD COUNTY—Continued.

TOWNSHIPS.	Between 1 and 10 acres occupied by		Between 10 and 25 acres occupied by		Between 25 and 50 acres occupied by		Between 50 and 100 acres occupied by		Between 100 and 200 acres occupied by		Over 200 acres occupied by		Total number of farms occupied by		Total acreage of farms occupied by	
	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.
Harrison, . . . . .	15	..	3	..	10	..	34	..	71	..	37	..	170	..	27,368	..
Snake Spring, . . . . .	16	..	10	..	19	..	21	..	46	..	35	..	147	..	19,242	..
Mann, . . . . .	5	..	3	..	9	..	28	..	54	..	62	..	161	..	30,396	..
Southampton, . . . . .	8	..	9	..	16	..	31	..	59	..	85	..	208	..	41,854	..
St. Clair, West, . . . . .	24	..	14	..	26	..	37	..	83	..	25	..	209	..	23,374	..
St. Clair, East, . . . . .	38	..	36	..	37	..	45	..	70	..	29	..	255	..	24,011	..
Providence, East, . . . . .	26	..	15	..	47	..	78	..	91	..	21	..	278	..	28,142	..
Providence, West, . . . . .	25	..	26	..	22	..	48	..	72	..	67	..	260	..	35,063	..
Monroe, . . . . .	12	..	9	..	27	..	47	..	128	..	137	..	360	..	68,531	..
Londonderry, . . . . .	62	..	13	..	19	..	36	..	64	..	83	..	274	..	43,926	..
Liberty, . . . . .	44	..	21	..	23	..	33	..	47	..	21	..	189	..	19,428	..
Kimmell, . . . . .	19	..	12	..	24	..	29	..	47	..	7	..	138	..	11,849	..
King, . . . . .	15	..	19	..	16	..	23	..	32	..	7	..	112	..	9,741	..
Juniata, . . . . .	25	..	15	..	17	..	48	..	105	..	64	..	274	..	37,114	..
Union, . . . . .	13	..	7	..	25	..	37	..	56	..	53	..	191	..	30,244	..
Woodbury, . . . . .	37	..	23	..	40	..	55	..	43	..	7	..	205	..	14,403	..
Hopewell, . . . . .	47	..	31	..	25	..	30	..	53	..	26	..	112	..	19,819	..
Woodbury, South, . . . . .	32	..	32	..	32	..	68	..	71	..	18	..	253	..	22,182	..
Napier, . . . . .	53	..	37	..	43	..	102	..	109	..	27	..	371	..	33,194	..
Bedford, . . . . .	120	..	44	..	47	..	70	..	105	..	51	..	437	..	39,916	..

NUMBER OF ACREAGE AND FARMS IN WESTMORELAND COUNTY OCCUPIED BY OWNERS AND BY TENANTS.

Fairfield, . . . . .	23	. . . .	22	. . . .	41	. . . .	109	. . . .	89	. . . .	46	. . . .	330	. . . .	38,376	. . . .
Allegheny, . . . . .	69	. . . .	40	. . . .	54	. . . .	93	. . . .	65	. . . .	7	. . . .	328	. . . .	22,280	. . . .
Penn., . . . . .	52	. . . .	48	. . . .	72	. . . .	108	. . . .	80	. . . .	15	. . . .	375	. . . .	28,101	. . . .
Franklin, . . . . .	54	. . . .	42	. . . .	61	. . . .	138	. . . .	69	. . . .	5	. . . .	369	. . . .	24,148	. . . .
Loyalhanna, . . . . .	15	. . . .	12	. . . .	16	. . . .	27	. . . .	37	. . . .	12	. . . .	119	. . . .	11,828	. . . .
Rostraver, . . . . .	87	. . . .	40	. . . .	57	. . . .	99	. . . .	73	. . . .	21	. . . .	377	. . . .	28,125	. . . .
Donegal, . . . . .	20	. . . .	23	. . . .	55	. . . .	81	. . . .	81	. . . .	22	. . . .	282	. . . .	28,172	. . . .
Cook, . . . . .	20	. . . .	15	. . . .	43	. . . .	89	. . . .	55	. . . .	23	. . . .	243	. . . .	25,547	. . . .
Lower Burrel, . . . . .	22	. . . .	19	. . . .	37	. . . .	43	. . . .	26	. . . .	3	. . . .	150	. . . .	10,097	. . . .
Upper Burrel, . . . . .	11	. . . .	22	. . . .	32	. . . .	53	. . . .	25	. . . .	. . . .	. . . .	143	. . . .	9,261	. . . .
Bell, . . . . .	19	. . . .	16	. . . .	18	. . . .	60	. . . .	63	. . . .	3	. . . .	179	. . . .	14,861	. . . .
St. Clair, . . . . .	13	. . . .	18	. . . .	23	. . . .	47	. . . .	25	. . . .	7	. . . .	133	. . . .	14,761	. . . .
Washington, . . . . .	13	. . . .	19	. . . .	41	. . . .	112	. . . .	56	. . . .	5	. . . .	246	. . . .	19,997	. . . .
Sewickley, . . . . .	88	. . . .	34	. . . .	48	. . . .	93	. . . .	68	. . . .	3	. . . .	334	. . . .	20,452	. . . .
North Huntingdon, . . . . .	90	. . . .	47	. . . .	36	. . . .	61	. . . .	67	. . . .	10	. . . .	311	. . . .	20,113	. . . .
Salem, . . . . .	57	. . . .	32	. . . .	84	. . . .	111	. . . .	106	. . . .	9	. . . .	399	. . . .	30,530	. . . .
Ligonier, . . . . .	56	. . . .	47	. . . .	73	. . . .	134	. . . .	133	. . . .	38	. . . .	481	. . . .	50,158	. . . .
East Huntingdon, . . . . .	138	. . . .	64	. . . .	54	. . . .	109	. . . .	80	. . . .	3	. . . .	448	. . . .	24,037	. . . .
South Huntingdon, . . . . .	30	. . . .	44	. . . .	74	. . . .	142	. . . .	80	. . . .	10	. . . .	380	. . . .	29,731	. . . .
Mt. Pleasant, . . . . .	110	. . . .	91	. . . .	89	. . . .	145	. . . .	116	. . . .	21	. . . .	572	. . . .	43,212	. . . .
Unity, . . . . .	82	. . . .	94	. . . .	117	. . . .	210	. . . .	138	. . . .	11	. . . .	652	. . . .	46,814	. . . .
Derry, . . . . .	220	. . . .	67	. . . .	98	. . . .	194	. . . .	166	. . . .	26	. . . .	771	. . . .	56,554	. . . .
Hempfield, . . . . .	212	. . . .	142	. . . .	126	. . . .	263	. . . .	162	. . . .	15	. . . .	920	. . . .	54,580	. . . .

## NUMBER AND ACREAGE OF FARMS IN PERRY COUNTY OCCUPIED BY OWNERS AND BY TENANTS.

TOWNSHIPS.	Between 1 and 10 acres occupied by		Between 10 and 25 acres occupied by		Between 25 and 50 acres occupied by		Between 50 and 100 acres occupied by		Between 100 and 200 acres occupied by		Over 200 acres occupied by		Total number of farms occupied by		Total acreage of farms occupied by	
	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.
Buffalo.	17	4	11	..	20	..	40	..	35	..	7	..	130	..	11,284	..
Carroll.	69	..	46	..	64	..	78	..	50	..	2	..	309	..	16,833	..
Centre.	37	..	40	..	40	..	61	..	51	..	11	..	240	..	17,536	..
Greenwood.	6	..	20	..	22	..	50	..	40	..	11	..	149	..	13,861	..
Howe.	8	..	12	..	9	..	15	..	14	..	3	..	61	..	4,915	..
Jackson.	35	..	23	..	23	..	50	..	36	..	22	..	189	..	20,393	..
Junata.	11	..	17	..	20	..	56	..	43	..	2	..	149	..	12,433	..
Liverpool.	27	..	17	..	20	..	37	..	45	..	8	..	154	..	12,781	..
Madison.	37	..	16	..	23	..	23	..	42	..	21	..	162	..	15,118	..
Miller.	7	..	4	..	10	..	55	..	18	..	8	..	72	..	7,362	..
Oliver.	21	..	15	..	15	..	31	..	9	..	2	..	93	..	5,019	..
Penn.	57	..	13	..	15	..	37	..	28	..	9	..	150	..	11,864	..
Rye.	42	..	58	..	29	..	34	..	32	..	10	..	205	..	15,430	..
Sandy Hill.	20	..	13	..	24	..	21	..	46	..	15	..	139	..	15,046	..
Saville.	23	..	28	..	41	..	71	..	71	..	22	..	256	..	25,904	..
Spring.	64	..	39	..	48	..	44	..	50	..	9	..	254	..	17,045	..
Toboyne.	16	..	8	..	20	..	29	..	46	..	31	..	150	..	28,149	..
Tuscarora.	30	..	22	..	25	..	38	..	43	..	14	..	172	..	15,568	..
Tyrone.	49	..	21	..	22	..	41	..	53	..	17	..	203	..	20,684	..
Watts.	15	..	8	..	12	..	24	..	24	..	3	..	86	..	6,814	..
Wheatfield.	18	..	15	..	20	..	56	..	31	..	4	..	153	..	11,743	..



NUMBER AND ACREAGE OF FARMS IN BLAIR COUNTY OCCUPIED BY OWNERS AND BY TENANTS.

Antis, . . . . .	26	27	31	53	71	50	258	35,540	..
Allegheny, . . . . .	21	19	24	41	37	26	168	18,716	..
Junlata, . . . . .	8	8	30	35	43	17	141	15,935	..
Huston, . . . . .	20	31	22	28	53	27	191	19,266	..
Greenfield, . . . . .	22	39	45	73	48	18	245	21,100	..
Freedom, . . . . .	19	20	18	32	35	4	128	10,052	..
Frankstown, . . . . .	46	24	25	38	73	33	239	28,274	..
Catharine, . . . . .	2	4	8	9	41	26	90	15,583	..
Blair, . . . . .	66	24	19	17	25	7	158	8,116	..
Woodbury, . . . . .	9	17	13	31	57	9	132	17,857	..
Taylor, . . . . .	40	31	27	47	42	5	192	12,955	..
Tyrone, . . . . .	9	11	15	17	64	40	156	24,890	..
Snyder, . . . . .	52	38	36	47	43	39	255	25,883	..
North Woodbury, . . . . .	88	39	22	60	44	3	256	13,203	..
Logan, No. 1 district, . . . . .	61	30	31	28	20	6	176	9,162	..
Logan, No. 2 district, . . . . .	38	17	21	22	22	13	133	10,867	..
Logan, No. 3 district, . . . . .	6	6	2	6	2	6	128	3,346	..
Logan, No. 4 district, . . . . .	62	12	11	7	8	3	103	3,361	..

## NUMBER AND ACREAGE OF FARMS IN NORTHAMPTON COUNTY OCCUPIED BY OWNERS AND BY TENANTS.

TOWNSHIPS.	Between 1 and 10 acres occupied by		Between 10 and 25 acres occupied by		Between 25 and 50 acres occupied by		Between 50 and 100 acres occupied by		Between 100 and 200 acres occupied by		Over 200 acres occupied by		Total number of farms occupied by		Total acreage of farms occupied by	
	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.
Bethlehem, . . . . .	86	..	62	..	39	..	82	..	26	..	..	..	295	..	12,501	..
Allen, . . . . .	45	..	36	..	26	..	40	..	17	..	1	..	165	..	7,389	..
Bushkill, . . . . .	212	..	96	..	84	..	71	..	25	..	2	..	190	..	15,328	..
East Allen, . . . . .	37	..	36	..	29	..	30	..	42	..	1	..	175	..	9,816	..
Forks, . . . . .	37	..	37	..	22	..	42	..	21	..	1	..	160	..	7,405	..
Hanover, . . . . .	11	..	17	..	12	..	20	..	13	..	..	..	73	..	3,920	..
Lehigh, . . . . .	176	..	134	..	88	..	80	..	33	..	3	..	509	..	17,787	..
Lower Saucon, . . . . .	213	..	116	..	91	..	90	..	39	..	2	..	551	..	18,707	..
Moore, . . . . .	208	..	139	..	132	..	107	..	29	..	6	..	621	..	21,806	..
Upper Mt. Bethel, . . . . .	96	..	95	..	86	..	131	..	59	..	5	..	472	..	24,057	..
Palmer, . . . . .	39	..	25	..	32	..	38	..	25	..	..	..	189	..	7,008	..
Plainfield, . . . . .	141	..	113	..	72	..	79	..	30	..	3	..	438	..	15,451	..
Lower Mt. Bethel, . . . . .	20	..	26	..	44	..	77	..	49	..	1	..	217	..	14,351	..
Lower Nazareth, . . . . .	48	..	23	..	22	..	42	..	28	..	..	..	163	..	8,117	..
Upper Nazareth, . . . . .	34	..	29	..	16	..	22	..	13	..	1	..	115	..	4,923	..
Washington, . . . . .	89	..	60	..	49	..	81	..	12	..	1	..	292	..	10,740	..
Williams, . . . . .	168	..	85	..	67	..	49	..	21	..	1	..	391	..	10,686	..

NUMBER AND ACREAGE OF FARMS IN FRANKLIN COUNTY OCCUPIED BY OWNERS AND BY TENANTS.

Quincy, . . . . .	179	. . . . .	97	. . . . .	52	. . . . .	45	. . . . .	59	. . . . .	2	. . . . .	434	. . . . .	25,669	. . . . .
Guliford, . . . . .	81	. . . . .	64	. . . . .	69	. . . . .	121	. . . . .	100	. . . . .	4	. . . . .	439	. . . . .	28,087	. . . . .
Washington, . . . . .	58	. . . . .	91	. . . . .	64	. . . . .	78	. . . . .	72	. . . . .	4	. . . . .	367	. . . . .	21,484	. . . . .
Peters, . . . . .	99	. . . . .	93	. . . . .	55	. . . . .	64	. . . . .	94	. . . . .	35	. . . . .	441	. . . . .	32,348	. . . . .
Montgomery, . . . . .	16	. . . . .	39	. . . . .	53	. . . . .	90	. . . . .	133	. . . . .	23	. . . . .	354	. . . . .	35,446	. . . . .
St. Thomas, . . . . .	71	. . . . .	43	. . . . .	26	. . . . .	54	. . . . .	87	. . . . .	26	. . . . .	307	. . . . .	28,487	. . . . .
Letterkenny, . . . . .	106	. . . . .	105	. . . . .	63	. . . . .	87	. . . . .	128	. . . . .	19	. . . . .	508	. . . . .	37,964	. . . . .
Southampton, . . . . .	23	. . . . .	32	. . . . .	33	. . . . .	62	. . . . .	72	. . . . .	6	. . . . .	228	. . . . .	22,924	. . . . .
Metal, . . . . .	24	. . . . .	20	. . . . .	19	. . . . .	37	. . . . .	65	. . . . .	17	. . . . .	182	. . . . .	21,520	. . . . .
Hamilton, . . . . .	109	. . . . .	55	. . . . .	46	. . . . .	61	. . . . .	68	. . . . .	9	. . . . .	348	. . . . .	19,801	. . . . .
Warren, . . . . .	8	. . . . .	13	. . . . .	9	. . . . .	18	. . . . .	33	. . . . .	28	. . . . .	109	. . . . .	18,623	. . . . .
Fannett, . . . . .	24	. . . . .	47	. . . . .	47	. . . . .	78	. . . . .	98	. . . . .	29	. . . . .	323	. . . . .	35,692	. . . . .
Lurgan, . . . . .	12	. . . . .	39	. . . . .	38	. . . . .	53	. . . . .	57	. . . . .	17	. . . . .	216	. . . . .	19,883	. . . . .
Antrim, . . . . .	126	. . . . .	87	. . . . .	79	. . . . .	110	. . . . .	162	. . . . .	17	. . . . .	581	. . . . .	41,587	. . . . .
Greene, . . . . .	98	. . . . .	51	. . . . .	48	. . . . .	64	. . . . .	119	. . . . .	13	. . . . .	393	. . . . .	31,458	. . . . .

NUMBER AND ACREAGE OF FARMS IN LEBANON COUNTY OCCUPIED BY OWNERS AND BY TENANTS.

North Cornwall, . . . . .	21	. . . . .	6	. . . . .	10	. . . . .	27	. . . . .	31	. . . . .	. . . . .	. . . . .	155	. . . . .	6,724	. . . . .
Bethel, . . . . .	130	. . . . .	63	. . . . .	51	. . . . .	51	. . . . .	66	. . . . .	11	. . . . .	372	. . . . .	21,018	. . . . .
Swatara, . . . . .	102	. . . . .	39	. . . . .	40	. . . . .	46	. . . . .	40	. . . . .	1	. . . . .	268	. . . . .	11,909	. . . . .
Jackson, . . . . .	136	. . . . .	81	. . . . .	66	. . . . .	70	. . . . .	38	. . . . .	1	. . . . .	392	. . . . .	15,207	. . . . .
South Lebanon, . . . . .	94	. . . . .	32	. . . . .	22	. . . . .	74	. . . . .	27	. . . . .	5	. . . . .	254	. . . . .	15,556	. . . . .
Cornwall, . . . . .	29	. . . . .	7	. . . . .	10	. . . . .	17	. . . . .	12	. . . . .	6	. . . . .	81	. . . . .	7,436	. . . . .
Cold Springs, . . . . .	12	. . . . .	11	. . . . .	4	. . . . .	5	. . . . .	2	. . . . .	32	. . . . .	66	. . . . .	14,522	. . . . .
Millcreek, . . . . .	326	. . . . .	43	. . . . .	34	. . . . .	38	. . . . .	38	. . . . .	7	. . . . .	486	. . . . .	12,995	. . . . .
North Lebanon, . . . . .	92	. . . . .	40	. . . . .	32	. . . . .	52	. . . . .	35	. . . . .	1	. . . . .	252	. . . . .	11,635	. . . . .

## NUMBER AND ACREAGE OF FARMS IN LEBANON COUNTY—Continued.

TOWNSHIPS.	Between 1 and 10 acres occupied by		Between 10 and 25 acres occupied by		Between 25 and 50 acres occupied by		Between 50 and 100 acres occupied by		Over 200 acres occupied by		Total number of farms occupied by		Total acreage of farms occupied by	
	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.	Owners.	Tenants.
Heidelberg, . . . . .	175	...	80	...	46	...	57	...	2	...	337	...	13,941	...
Union, . . . . .	158	...	81	...	62	...	72	...	7	...	432	...	18,339	...
Londonderry, . . . . .	151	...	82	...	46	...	60	...	15	...	436	...	24,980	...
East Hanover, . . . . .	104	...	65	...	40	...	72	...	4	...	354	...	18,649	...
North Annville, . . . . .	70	...	33	...	18	...	45	...	...	...	207	...	10,884	...
South Annville, . . . . .	91	...	32	...	13	...	43	...	...	...	228	...	11,356	...

## NUMBER AND ACREAGE OF FARMS IN JUNIATA COUNTY OCCUPIED BY OWNERS AND BY TENANTS.

Milford, . . . . .	50	...	38	...	36	...	39	...	46	...	23	...	232	...	23,487	...
Susquehanna, . . . . .	11	...	16	...	33	...	34	...	35	...	2	...	131	...	9,361	...
Spruce Hill, . . . . .	51	...	29	...	21	...	43	...	42	...	4	...	190	...	12,625	...
Walker, . . . . .	38	...	33	...	31	...	57	...	51	...	7	...	217	...	16,165	...
Tuscarora, . . . . .	31	...	19	...	30	...	48	...	58	...	24	...	210	...	23,828	...
Turbett, . . . . .	56	...	25	...	17	...	22	...	30	...	4	...	154	...	8,601	...
Lack, . . . . .	35	...	35	...	39	...	102	...	72	...	21	...	304	...	30,325	...
Beale, . . . . .	31	...	26	...	27	...	54	...	37	...	2	...	177	...	12,141	...
Fayette, . . . . .	50	...	62	...	64	...	75	...	56	...	11	...	318	...	22,430	...
Fernanagh, . . . . .	51	...	32	...	30	...	34	...	47	...	15	...	209	...	17,352	...
Delaware, . . . . .	33	...	31	...	35	...	49	...	52	...	11	...	211	...	16,267	...
Monroe, . . . . .	32	...	26	...	42	...	65	...	26	...	4	...	195	...	12,295	...
Greenwood, . . . . .	9	...	25	...	26	...	36	...	33	...	5	...	134	...	10,714	...



NUMBER AND ACREAGE OF FARMS IN MIFFLIN COUNTY OCCUPIED BY OWNERS AND BY TENANTS.

Wayne, . . . . .	39	. . . . .	18	. . . . .	31	. . . . .	48	. . . . .	56	. . . . .	27	. . . . .	219	. . . . .	26,854	. . . . .
Union, . . . . .	19	. . . . .	23	. . . . .	26	. . . . .	52	. . . . .	43	. . . . .	10	. . . . .	173	. . . . .	14,369	. . . . .
Oliver, . . . . .	66	. . . . .	13	. . . . .	17	. . . . .	41	. . . . .	74	. . . . .	17	. . . . .	228	. . . . .	19,721	. . . . .
Decatur, . . . . .	15	. . . . .	39	. . . . .	59	. . . . .	70	. . . . .	76	. . . . .	17	. . . . .	267	. . . . .	25,446	. . . . .
Granville, . . . . .	60	. . . . .	23	. . . . .	36	. . . . .	43	. . . . .	60	. . . . .	30	. . . . .	252	. . . . .	24,294	. . . . .
Brown, . . . . .	3	. . . . .	9	. . . . .	12	. . . . .	14	. . . . .	42	. . . . .	15	. . . . .	101	. . . . .	13,023	. . . . .
Armagh, . . . . .	38	. . . . .	19	. . . . .	17	. . . . .	36	. . . . .	92	. . . . .	74	. . . . .	276	. . . . .	55,584	. . . . .
Bratton, . . . . .	59	. . . . .	24	. . . . .	21	. . . . .	24	. . . . .	29	. . . . .	11	. . . . .	168	. . . . .	16,619	. . . . .
Derry, . . . . .	26	. . . . .	20	. . . . .	18	. . . . .	21	. . . . .	49	. . . . .	17	. . . . .	151	. . . . .	16,361	. . . . .
Menno, . . . . .	16	. . . . .	25	. . . . .	20	. . . . .	35	. . . . .	55	. . . . .	6	. . . . .	157	. . . . .	13,334	. . . . .

NUMBER AND ACREAGE OF FARMS IN FULTON COUNTY OCCUPIED BY OWNERS BY AND TENANTS.

Wells, . . . . .	27	. . . . .	15	. . . . .	32	. . . . .	51	. . . . .	31	. . . . .	45	. . . . .	201	. . . . .	26,735	. . . . .
Union, . . . . .	2	. . . . .	2	. . . . .	25	. . . . .	40	. . . . .	43	. . . . .	14	. . . . .	126	. . . . .	15,810	. . . . .
Todd, . . . . .	19	. . . . .	20	. . . . .	21	. . . . .	21	. . . . .	35	. . . . .	22	. . . . .	138	. . . . .	17,032	. . . . .
Thompson, . . . . .	4	. . . . .	4	. . . . .	21	. . . . .	54	. . . . .	65	. . . . .	12	. . . . .	160	. . . . .	18,417	. . . . .
Taylor, . . . . .	21	. . . . .	10	. . . . .	26	. . . . .	55	. . . . .	71	. . . . .	10	. . . . .	193	. . . . .	17,900	. . . . .
Belfast, . . . . .	10	. . . . .	12	. . . . .	28	. . . . .	58	. . . . .	97	. . . . .	28	. . . . .	233	. . . . .	27,559	. . . . .
Ayr, . . . . .	68	. . . . .	23	. . . . .	28	. . . . .	36	. . . . .	77	. . . . .	40	. . . . .	272	. . . . .	29,491	. . . . .
Bethel, . . . . .	8	. . . . .	10	. . . . .	29	. . . . .	49	. . . . .	81	. . . . .	25	. . . . .	202	. . . . .	25,483	. . . . .
Brush Creek, . . . . .	12	. . . . .	3	. . . . .	10	. . . . .	39	. . . . .	56	. . . . .	56	. . . . .	176	. . . . .	31,012	. . . . .
Dublin, . . . . .	17	. . . . .	16	. . . . .	25	. . . . .	63	. . . . .	51	. . . . .	32	. . . . .	204	. . . . .	24,291	. . . . .
Licking Creek, . . . . .	5	. . . . .	11	. . . . .	32	. . . . .	61	. . . . .	69	. . . . .	35	. . . . .	213	. . . . .	28,236	. . . . .



## STATISTICS OF STRIKES AND LOCKOUTS, FROM 1867 TO 1890.

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In the report of the Bureau for 1887 statistics were published of all strikes and lockouts for ten years preceding that year. The record is now presented for four years more. During this period strikes have been less frequent, and, on the whole, less serious than they had been before. Two or three exceptions, however, ought to be noted. The carpenters in Philadelphia struck on the first day of May, 1890, for the purpose of securing a reduction in a day's work to eight hours. This strike was general among all the carpenters in that city. The employers in some cases compromised with their employés on the basis of nine hours for a day's work; in other cases no agreement was reached and the employers, as far as possible, procured men from elsewhere. Within a few weeks, however, the larger portion returned to work on the former basis of ten hours for a day's work. No date can be given for the ending of this strike, as the men resumed work at different times. Another strike requiring special mention was among the miners in the Connellsville coke region in 1890. Nearly nine hundred men were concerned in it. The strike was so general that, though lasting only fifteen days, \$23,400 which would have been earned by the employés, if engaged in work, were sacrificed.

But the most important of all the strikes during this period was among the employés of the Philadelphia and Reading Railroad Company, beginning on the 20th of December, 1887. The crew of one of the switching trains in the yards of the railroad company in Philadelphia, who were Knights of Labor, refused to deliver some merchandise to the consignee, because he had declined to employ men belonging to their organization. The men were notified that the railroad company had nothing whatever to do with the labor agreements existing between the consignees and those whom they employed, but were obliged by law to deliver the merchandise in question, as well as that of all other shippers, and that the men, as their employés, were under obligation to unload the cars as directed. Five crews successively refused to remove these cars when ordered to do so, and were successively discharged. A committee of the Knights of Labor waited on the officials of the railroad company and demanded the reinstatement of the discharged men, which was refused. The leaders of that organization then ordered a strike of

all the railroad employés. A very considerable number however, refused to quit work and severed their connection with the organization. On the 24th of December the railroad company issued a general order requiring that all who desired to retain their positions should report for duty on the morning of the 27th; and that the places of those who did not would be filled by other men. The order further stated that the employés who had been discharged for disobedience of orders, in refusing to remove trains to their places of destination, would not be permitted to enter the service of the company again in any capacity. A large number returned to work, but nearly three thousand remained away and their places, so it is stated in the company's official report, were promptly filled by new men without any serious or prolonged interruption to the business of the company.

On the first of the following January the miners employed by the Philadelphia and Reading Coal and Iron Company quit work in consequence of a refusal of the company to continue the increased rates of wages, which had prevailed for a few months preceding under a special agreement. This strike among the miners lasted for nearly two months, when they resumed work on the old basis of wages. It is estimated that the loss to the company and to the miners was fully \$1,500,000. The basis of wages on which the miners resumed work had been in operation for many years. The company declared that it was impossible to raise the basis of wages and to concede the advance demanded and retain its business in the face of active competition from other companies.

It should be stated, however, that, after the miners had returned to work, the company considered the question of their supplies for mining, which had been the occasion of considerable dissatisfaction. In many instances the prices of these supplies seemed excessive, but as the price of contract mining between the miners and the company was originally based on these prices, they were really not so high as they seemed to be, but to remove all apparent causes for complaint, the company decided that after February of that year no profit whatever should be charged on supplies furnished to the miners. These were to be furnished at net cost in addition to ten per cent for waste and depreciation. This addition of ten per cent it is declared, hardly covered the loss to the company. Of course, the decrease in the price of supplies to the miners has resulted practically in increasing their wages.

A strike is the last remedy for obtaining redress, and it certainly ought not to be adopted without cause and until all other means have failed. In Great Britain especially, the men of late years who are members of labor organizations have indulged in fewer strikes than formerly, and either they or their employers, or both have grown wiser, for strikes certainly are less frequent among organized workingmen than they were fifteen years ago. Probably all have learned wisdom



through these experiences. Our industrial establishments seem to be going through the same experiences which those in England did twenty or thirty years ago. Let us not believe however, that strikes are always to continue. All classes learn in some way, though some more easily and quickly than others; but a strike is a hard remedy, and the lessons which employed and employer have already received ought to make them slow to enter into such a conflict whenever it can possibly be avoided.

From the following summary it will be seen that the strikes have originated from a variety of causes, though an increase of wages has been more general than any other. This also shows how many failed, and how many succeeded wholly or in part. In ascertaining the losses to the employers and employés it is much easier to ascertain the losses to the latter class than those to the former. In the one case the loss is regarded as the wages sacrificed; in the other the loss may be not only the sacrifice of profits on sales that would probably have been made if no strike had occurred, but the prospective loss perhaps from the diversion of trade, injury to the plant, etc.

## 1887.

For increase, . . . . .	22	Succeeded, . . . . .	6	Failed, . . . . .	12
Against reduction, . . .	3	Succeeded, . . . . .	2	Failed, . . . . .	1
		Partly succeeded, . . .	4		

## 1888.

For increase, . . . . .	4	Succeeded, . . . . .	0	Failed, . . . . .	4
Against reduction, . . .	2	Succeeded, . . . . .	0	Failed, . . . . .	2
		Partly succeeded, . . .	0		

## 1889.

For increase, . . . . .	5	Succeeded, . . . . .	1	Failed, . . . . .	3
Against reduction, . . .	0	Succeeded, . . . . .	0	Failed, . . . . .	0
		Partly succeeded, . . .	1		

## 1890.

For increase, . . . . .	13	Succeeded, . . . . .	4	Failed, . . . . .	7
Against reduction, . . .	2	Succeeded, . . . . .	0	Failed, . . . . .	2
		Partly succeeded, . . .	2		

## STRIKES AND LOCKOUTS, MISCELLANEOUS CAUSES.

1887.

*Industries.*

Printers, . . . . .	For pay for blank pages, . . . . .	Failed.
Soapmakers, . . . . .	For change in methods of working, . . . . .	Failed.
Plumbers, . . . . .	For a nine-hour working day, . . . . .	Failed.
Brickmakers, . . . . .	Employers refused men's demands, . . . . .	Failed.
Boilermakers (two establishments), . . . . .	Employers refused to discharge a non-union man, . . . . .	Failed.
Brewery employes, . . . . .	For equalization of wages, . . . . .	Failed.
Street railway employes, . . . . .	Against discharge of an employé, . . . . .	Failed.
Ironworks employes, . . . . .	For shorter hours, . . . . .	Succeeded.
Plumbers' supplies employes, . . . . .	For additional help, . . . . .	Failed.
Ironworkers' employes, . . . . .	For reemployment of discharged men, . . . . .	Failed.
Bolt makers, . . . . .	For restoration of former rate of wages, . . . . .	Failed.
Coal miners, . . . . .	Against the introduction of a machine, . . . . .	Failed.
Rug weavers, . . . . .	For being connected with a labor union, . . . . .	Men succeeded.
Glass cutters (lockout), . . . . .	Against the discharge of employes, . . . . .	Succeeded partly.
Glass workers, . . . . .	Against method of computing time, . . . . .	Failed.
Coal miners, . . . . .	Against new orders of employers, . . . . .	Failed.
Petroleum refinery employes, . . . . .	Against working at nights, . . . . .	Succeeded.
Yarn mill employes (females), . . . . .	Against employment of a non-union man, . . . . .	Failed.
Stove moulders, . . . . .	In anticipation of a strike, . . . . .	Failed.
Clothing cutters and makers (lockout), . . . . .		
1888.		
Bricklayers, . . . . .	For a reduction of working hours, . . . . .	Succeeded.
Iron works employes, . . . . .	For a new scale of wages, . . . . .	Failed.
Cigarmakers, . . . . .	Against employment of non-union men, . . . . .	Failed.
Restaurant waiters, . . . . .	Against the arrest of one of their number, . . . . .	Failed.
Glass workers (lockout), . . . . .	Against the organization of a labor union, . . . . .	Men succeeded.
Iron works employes, . . . . .	For a new scale of wages, . . . . .	Succeeded.
Carpet weavers, . . . . .	Against the introduction of machinery, . . . . .	Failed.
Printers, . . . . .	For payment of arrears of wages, . . . . .	Non-union were and are still employed.
Coal miners, boys, . . . . .	Against new rules, . . . . .	Failed.
Stevedores, . . . . .	In sympathy with striking railroad employes, . . . . .	Failed.
1889.		
Telephone girls, . . . . .	Against Sunday work, . . . . .	Failed.
Iron works employes, . . . . .	For a change in pay days, . . . . .	Succeeded partly.
Ship works employes, . . . . .	Dissatisfaction with hours of labor, . . . . .	Succeeded.
Coal miners (boys), . . . . .	Against discharge of a driver, . . . . .	Failed.
House carpenters, . . . . .	For shorter hours of labor, . . . . .	Succeeded.

1890.

Stove moulders, . . . . .	Against objectionable patterns, . . . . .	Failed.
Iron works laborers, . . . . .	Against working with Hungarians, . . . . .	Failed.
Coal miners (boys), . . . . .	Against discharge of one of their number, . . . . .	Failed.
Puddlers, . . . . .		
Iron works employés, . . . . .	Dissatisfaction with scale of wages, . . . . .	Failed.
Iron works employés, . . . . .	For reduction in working hours, . . . . .	Failed.
Iron works employés, . . . . .	Against introduction of machinery, . . . . .	Failed.
Coke workers, . . . . .	For discharge of non-union men, . . . . .	Failed.
Iron works employés, . . . . .	Dissatisfaction with amount of work, . . . . .	Failed.
Iron works employés, . . . . .	Dissatisfaction with hours of labor, . . . . .	Failed.
Machinists, . . . . .	For reduction of working hours, . . . . .	Succeeded partly.
Cigarmakers, . . . . .	Against the employment of an objectionable man, . . . . .	Succeeded.
Silk mill employés, . . . . .	Against a new scale of wages, . . . . .	Failed.
Machinists, . . . . .	For reduction of working hours, . . . . .	Failed.
Sugar refinery employés, . . . . .	Against methods of payment of wages, . . . . .	Failed.
Shirtmakers, . . . . .	Dissatisfaction with new rules, . . . . .	Failed.
Glass workers (lockout), . . . . .	Against performing more work for same rate of wages, . . . . .	Men succeeded.
Glass workers (lockout), . . . . .	Against discharge of one of their number, . . . . .	Men succeeded.
Glass workers (lockout), . . . . .	Against increase of work, . . . . .	Men succeeded.
Salesmen, etc., clothing trade, . . . . .	For shorter hours and observance of holiday, . . . . .	Succeeded.
Boilermakers and helpers, . . . . .	For reduction of working hours, . . . . .	Succeeded.
Wire works employés, . . . . .	Against employer refusing to recognize labor union, . . . . .	Failed.
Coal miners, . . . . .	Against working with Italian miners, . . . . .	Failed.
Coal miners, . . . . .	For permission to ride in cars to their working places, . . . . .	Failed.

## STATISTICS OF STRIKES

INDUSTRIES AND YEARS.	LOCALITY.	CAUSE OR OBJECT.
1887.		
All employés of hosiery manufactory.	Philadelphia, . . . .	For increase of wages, . . . . .
Compositors, . . . . .	Philadelphia, . . . .	For pay for blank pages, . . . . .
Ironworkers, . . . . .	Allentown, . . . . .	For increase of wages, . . . . .
Soapmakers, . . . . .	Philadelphita, . . . .	For a change in method of working, . . . .
Tin and sheet iron workers, . . . . .	Philadelphia, . . . .	For shorter hours and increase of wages, .
Plumbers, . . . . .	Philadelphia, . . . .	For a 9-hour day and uniform rate of wages,
Hardware moulders, . . . . .	Reading, . . . . .	Against the discharge of a workman, . . .
Brickmakers, . . . . .	Philadelphia, . . . .	Employer refused to agree to men's demands, . . . . .
Boilermakers, . . . . .	Lebanon, . . . . .	Employer refused to discharge a non-union man, . . . . .
Boilermakers, . . . . .	Reading, . . . . .	Employer refused to discharge a non-union man, . . . . .
Cigarmakers, . . . . .	Philadelphia, . . . .	For increase of wages, . . . . .
Employés, salt works, . . . . .	Natrona, . . . . .	For increase of wages, . . . . .
Brewery employés, . . . . .	Philadelphia, . . . .	For equalization of wages, . . . . .
Coal miners, . . . . .	Springdale, . . . . .	For increase of wages, . . . . .
Ironworkers, . . . . .	Reading, . . . . .	For increase of wages, . . . . .
Street railroad employés, . . . . .	Reading, . . . . .	Against the discharge of an employé, . . .
Ironworkers, . . . . .	Philadelphia, . . . .	Against the discharge of an employé, . . .
Clothingmakers, . . . . .	Philadelphia, . . . .	For increase of wages, . . . . .
Plumbers' supplies, . . . . .	Philadelphia, . . . .	For shorter hours, . . . . .
Tinroofers, . . . . .	Philadelphia, . . . .	For shorter hours and increase of wages, .
Ironworkers, . . . . .	Pittsburgh, . . . . .	For additional help, . . . . .
Boltmakers, . . . . .	Philadelphia, . . . .	For réemployment of discharged men, . . .
Coal miners, . . . . .	Beaver Falls, . . . .	For increase of wages, . . . . .
Coal miners, . . . . .	Beaver Falls, . . . .	For increase of wages, . . . . .
Coal miners, . . . . .	Beaver Falls, . . . .	For increase of wages, . . . . .
Coal miners, . . . . .	Milnesville, . . . . .	Restoration of former rate of wages, . . .
Ironworkers, . . . . .	Pottsville, . . . . .	For increase of wages, . . . . .
Rug weavers, etc., . . . . .	Philadelphia, . . . .	Against the introduction of a bobbin-machine, . . . . .
Glasscutters (lockout), . . . . .	Honesdale, . . . . .	Discharged men for being connected with labor union, . . . . .
Glassworkers, . . . . .	Philadelphia, . . . .	For increase of wages and discharge of two men, . . . . .
Glassworkers (general strike), . . . .	Philadelphia, Pitts- burgh, Homes- tead & Tarentum.	For increase of wages, . . . . .



## AND LOCKOUTS.

Ordered by labor organization.	ESTABLISHMENTS.		Number of persons engaged in strike.	Number of persons involved in strike.	Beginning.	End.	Duration—days.	Succeeded.	Loss.	Employer's loss.
	Number.	Days closed.								
Yes. .	1	21	100	150	Jan. 10.	Feb. 1,	21	No. . .	\$4,900	\$2,000
Yes. .	1	None.	10	10	Feb. 14.	Feb. 14,	.....	No. . .	.....	.....
No. . .	1	None.	20	20	Mar. 15.	Mar. 15.	.....	No. . .	None. .	None.
No. . .	1	None.	.....	.....	.....	.....	.....	.....	.....	.....
Yes. .	1	None.	5	5	May 4,	May 4,	3	Yes. . .	40	250
Yes. .	1	None.	2	2	May 1,	May 1,	None.	No. . .	.....	.....
No. . .	1	None.	1	7	June 16,	June 16,	6	No. . .	700	None.
Yes. .	1	None.	14	14	April 8,	April 8,	None.	No. . .	†	None.
Yes. .	1	1	5	5	July 26,	July 26,	1	No. . .	7 50	None.
No. . .	1	6	20	45	July 25,	Aug. 1,	6	No. . .	275	None.
Yes. .	1	7	250	250	Aug. 18.	Aug. 23,	5	Partly.	2,800	500
Yes. .	1	*60	400	600	April 12.	Sept. 1,	138	No. . .	80,000	†
Yes. .	40	None.	1,600	1,600	Jan. 3,	Feb. 21.	49	No. . .	150,000	†
Yes. .	1	171	80	155	Aug. 10.	Mar. 25, 1888,	228	No. . .	37,000	†
No. . .	1	13	75	100	Jan. 11.	Jan. 24,	13	No. . .	1,200	None.
No. . .	1	None.	12	12	Aug. 1,	Aug. 1,	None.	No. . .	None. .	†
Yes. .	1	4	25	25	Jan. 19.	Jan. 23.	4	Yes. . .	.....	.....
Yes. .	1	14	83	83	Mar. 29.	April 11.	14	No. . .	1,800	600
Yes. .	1	28	25	25	May 1,	May 29.	28	No. . .	350	300
Yes. .	1	None.	3	3	May 15.	May 15.	None.	No. . .	§	None.
Yes. .	1	12	225	275	May 9.	May 21.	12	No. . .	8,000	†
Yes. .	1	None.	404	404	Feb. 4.	Feb. 11.	7	No. . .	†	†
No. . .	1	14	11	18	Jan. 1,	Jan. 15.	14	No. . .	380	100
No. . .	1	14	6	9	Jan. 1,	Jan. 15,	14	No. . .	190	50
No. . .	1	14	6	9	Jan. 1,	Jan. 15,	14	No. . .	180	56
Yes. .	1	27	34	390	Feb. 25.	Mar. 28,	34	No. . .	5,500	2,500
Yes. .	1	6	600	600	July 18.	July 25.	6	Yes. . .	3,300	†
Yes. .	1	5	5	150	Jan. 4,	Jan. 9,	5	No. . .	1,375	300
No. . .	.....	42	33	39	July 21.	Sept. 8,	42	Yes. . .	3,660	†
Yes. .	.....	60	9	11	June 28,	Aug. 28,	60	Partly.	1,420	†
Yes. .	.....	150	1,608	2,608	Dec. 12,	May 12, 1888,	150	Yes. . .	495,264	†

\* Partially.

† Cannot tell.

‡ Not estimated.

§ Men discharged.

## STRIKES AND LOCKOUTS

INDUSTRIES AND YEARS.	LOCALITY.	CAUSE OR OBJECT.
1887.		
Coal miners, . . . . .	Luzerne borough, .	Dissatisfaction with method of computing time, . . . . .
Textile workers, . . . . .	Philadelphia, . . .	For increase of wages, . . . . .
Petroleum refining employés, . . . .	Philadelphia, . . .	Against orders of employers, . . . . .
Iron works employés, . . . . .	Blandon, . . . . .	For increase of wages, . . . . .
Rolling mill employés, . . . . .	Harrisburg, . . . .	For increase of wages, . . . . .
Rolling mill employés, . . . . .	Coatesville, . . . .	For increase of wages, . . . . .
Rolling mill employés, . . . . .	Coatesville, . . . .	For increase of wages, . . . . .
Yarn mill employés (females), . . . .	Bristol, . . . . .	Against working at night, . . . . .
Stove moulders, . . . . .	Philadelphia, . . . .	Against employment of non-union men, .
Shoemakers, . . . . .	Philadelphia, . . . .	Against a reduction of wages, . . . . .
Puddlers, . . . . .	Blandon, . . . . .	For increase of wages, . . . . .
Silk mill operatives (females), . . . .	Harrisburg, . . . . .	Against a reduction of wages, . . . . .
Dock laborers, . . . . .	Erie, . . . . .	Against a reduction of wages, . . . . .
Clothing cutters and makers (lockout),	Philadelphia, . . . .	In anticipation of a strike, . . . . .
Stevedores, . . . . .	Philadelphia, . . . .	For increase of wages, . . . . .
Freight trainmen, . . . . .	Pittsburgh, . . . . .	For increase of wages, . . . . .
1888.		
Carpet weavers, . . . . .	Philadelphia, . . . .	For increase of wages, . . . . .
Bricklayers, . . . . .	Media, . . . . .	For reduction of hours, . . . . .
Coal miners, . . . . .	Glenlyon, . . . . .	For increase of wages, . . . . .
Ironworkers, . . . . .	Hollidaysburg, . . .	For a new scale of wages, . . . . .
Cigarmakers, . . . . .	Philadelphia, . . . .	Against employment of non-union men, .
Restaurant waiters, . . . . .	Philadelphia, . . . .	Against the arrest of a dishonest waiter, .
Ironworkers, . . . . .	Bellefonte, . . . . .	Against a reduction of wages, . . . . .
Carpet weavers, . . . . .	Philadelphia, . . . .	For increase of wages, . . . . .
Glassworkers (lockout), . . . . .	Rochester, Pa., . .	Against the organization of a local union.
Glassworkers, . . . . .	Rochester, Pa., . .	For increase of wages, . . . . .
Rollers and puddlers, iron works, . .	Duncansville, . . .	Against a reduction of wages, . . . . .
Ironworkers (general strike), . . . .	Western Penn'a, . .	Disagreement as to scale of wages, . . . .
Carpet weavers, . . . . .	Philadelphia, . . . .	Against the introduction of improved machinery, . . . . .
Compositors, . . . . .	Williamsport, . . .	For payment of arrears of wages, . . . .
Driver boys, coal mines, . . . . .	Edwardsville, . . .	Against new rules, . . . . .
Stevedores, . . . . .	Philadelphia, . . . .	In sympathy with Philadelphia and Reading railroad employés who had struck, .

—Continued.

Ordered by labor organization.	ESTABLISHMENTS.		Number of persons engaged in strike.	Number of persons involved in strike.	Beginning.	End.	Duration—days.	Succeeded.	Loss.	Employer's loss.
	Number.	Days closed.								
No. . .	1	None.	50	50	Aug. 5.	Aug. 10.	5	No. . .	†	†
Yes. .	1	58	40	67	Nov. 4.	Jan. 2, 1888.	58	Yes. . .	†	†
Yes. .	1	None.	1,000	1,000	June 22.	July 6.	36	No. . .	\$26 000	\$2,500
No. . .	1	None.	22	29	Jan. 5.	Jan. 17.	12	No. . .	1,500	1,500
Yes. .	1	None.	35	165	Aug. 30.	Oct. 30.	62	Partly.	15,000	†
No. . .	1	9	12	78	Aug. 30, 1886.	Mar. 7, 1887.	127	Yes. . .	4,000	3,500
No. . .	1	84	12	132	Oct. 30, 1886.	Mar. 10, 1887.	130	No. . .	22,000	10,000
No. . .	1	14	47	275	May 5.	May 23.	14	Yes. . .	4,150	†
Yes. .	1	None.	50	50	April 8.	April 24.	16	No. . .	2,000	400
No. . .	1	21	600	600	Oct. 10.	Oct. 31.	21	No. . .	18,000	†
No. . .	1	28	20	110	Jan. 22.	Feb. 19.	28	No. . .	6,500	†
No. . .	1	None.	30	30	Aug. 5.	Aug. 12.	7	Yes. . .	225	†
Yes. .	...	...	150	250	July 30.	Aug. 16.	17	No. . .	6,000	10,000
No. . .	37	102	3,000	3,000	Feb. 8.	May 3.	102	No. . .	500,000	1,500,000
Yes. .	...	...	300	300	Mar. 14.	Mar. 31.	17	Partly.	12,000	†
No. . .	1	None.	100	100	Mar. 8.	Mar. 16.	8	No. . .	1,600	2,500
*	1	10	150	250	July 31.	Aug. 10.	10	No. . .	2,500	1,000
No. . .	1	2	15	17	Aug. 20.	Aug. 22.	2	Yes. . .	90	1,200
No. . .	1	None.	20	20	Feb. 1.	Feb. 6.	5	No. . .	300	200
Yes. .	1	60	125	125	April 1.	June 1.	60	No. . .	12,000	...
Yes. .	1	None.	175	175	Sept. 1.	Jan. 1, 1890.	485	No. . .	...	...
No. . .	1	None.	65	65	Mar. 18.	Mar. 18.	None.	No. . .	†	None.
Yes. .	1	48	100	200	July 1.	Aug. 17.	48	No. . .	15,000	1,500
*	1	None.	12	12	Jan. 10.	Jan. 10.	None.	No. . .	†	†
No. . .	1	60	12	14	May 25.	Aug. 3.	60	Yes. . .	2,400	†
Yes. .	1	60	60	90	Aug. 17.	Oct. 26.	60	No. . .	11,400	†
Yes. .	1	191	180	180	April 5.	Oct. 13.	180	No. . .	63,823	†
Yes. .	†	18	10,530	12,560	July 1.	July 18.	18	Yes. . .	270,000	†
No. . .	1	None.	60	60	Jan. 17.	Jan. 27.	10	No. . .	170	175
No. . .	1	None.	6	12	Feb. 7.	†	†	Yes. . .	†	†
No. . .	1	None.	12	12	Aug. 5.	Aug. 6.	2	No. . .	30	None.
Yes. .	...	...	250	400	Dec. 23.	Dec. 30.	7	No. . .	†	†

\* Not known.

† Non-union men are still employed.

‡ Not estimated.

## STRIKES AND LOCKOUTS

INDUSTRIES AND YEARS.	LOCALITY.	CAUSE OR OBJECT.
1889.		
Telephone girls. . . . .	Lancaster. . . . .	Objected to Sunday work. . . . .
Ironworkers. . . . .	Reading. . . . .	For increase of wages. . . . .
Ironworkers. . . . .	Beaver Falls. . . . .	Difficulty about pay-day. . . . .
Employés ship works. . . . .	Cbester. . . . .	Dissatisfaction with hours of labor. . . . .
Coal miners (driver boys). . . . .	Arccbald. . . . .	Because of discharge of a driver. . . . .
House carpenters. . . . .	Pittsburgh. . . . .	For shorter working hours. . . . .
Iron moulders (general strike). . . . .	Pittsburgh. . . . .	For increase of wages. . . . .
Stonemasons. . . . .	Jenkintown. . . . .	For increase of wages and shorter hours. . . . .
Stove moulders. . . . .	Philadelpbia. . . . .	Against objectionable patterns. . . . .
Boilermakers and helpers. . . . .	Scranton. . . . .	For increase of wages. . . . .
Blacksmiths. . . . .	Scranton. . . . .	For increase of wages. . . . .
Iron foundry laborers. . . . .	Minersville. . . . .	Against working with Hungarians. . . . .
Coal miners (boys). . . . .	Arccbald. . . . .	Against the discharge of one of their number. . . . .
1890.		
Glassworkers. . . . .	Pittsburgh. . . . .	For increase of wages. . . . .
Rug weavers. . . . .	Bethlehem. . . . .	Against reduction of wages. . . . .
Ironworkers. . . . .	McKeesport. . . . .	For increase of wages. . . . .
Puddlers. . . . .	Pittsburgh. . . . .	Dissatisfaction with scale of wages. . . . .
Glassworkers. . . . .	Pittsburgh. . . . .	Dissatisfaction with scale of wages. . . . .
Ironworkers. . . . .	Pittsburgh. . . . .	For reduction of working hours. . . . .
Ironworkers. . . . .	Pittsburgb. . . . .	Against the introduction of improved machinery. . . . .
Cokeworkers. . . . .	Mt. Pleasant. . . . .	For discharge of non-union men. . . . .
Ironworkers. . . . .	Kittanning. . . . .	Dissatisfaction with amount of work. . . . .
Ironworkers (lockout). . . . .	Lebanon. . . . .	Dissatisfaction with hours of labor. . . . .
Ironworkers. . . . .	Bristol. . . . .	For increase of wages. . . . .
Machinists. . . . .	Allegheny Clty. . . . .	For reduction of working hours. . . . .
Cigarmakers. . . . .	Lancaster. . . . .	Against the employment of an objectionable man. . . . .
Glassworkers. . . . .	Pittsburgh. . . . .	For increase of wages. . . . .
Silk mill employés. . . . .	Catasauqua. . . . .	Dissatisfaction with a new scale of wages. . . . .
Boys glass works. . . . .	Pittsburgh. . . . .	For increase of wages. . . . .
Machinists. . . . .	Pittsburgh. . . . .	For reduction of working hours. . . . .
Sugar refiners. . . . .	Pbiladelpbia. . . . .	Dissatisfaction with method of payments . . . . .
Coal miners. . . . .	Plains township. . . . .	For increase of wages. . . . .
Shirtmakers. . . . .	Ashland. . . . .	Dissatisfaction with new rules. . . . .
Coal miners. . . . .	Turtle Creek. . . . .	Against reduction of wages. . . . .



—Continued.

Ordered by labor organization.	ESTABLISHMENTS.		Number of persons engaged in strike.	Number of persons involved in strike.	Beginning.	End.	Duration—days.	Succeeded.	Loss.	Employer's loss.
	Number.	Days closed.								
No. . .	1	None.	4	4	June 18,	June 18,	None.	No. . .	†	\$300
No. . .	1	5	11	136	Aug. 27,	Sept. 30,	5	No. . .	\$1,200	None.
No. . .	1	2½	125	125	July 20.	July 24.	4	†	500	*
No. . .	1	None.	144	144	Aug. 8,	Aug. 15,	7	Yes. . .	976	None.
No. . .	1	14	38	480	Jan. 1.	Jan. 14,	14	No. . .	6,500	*
Yes. . .	*	18	1,020	1,270	May 1.	May 22,	18	Yes. . .	17,227	*
No. . .	*	49	693	893	Oct. 21,	Nov. 18,	49	Yes. . .	15,885	*
Yes. . .	1	12	30	30	May 1.	May 13,	12	†	300	*
Yes. . .	1	6	81	144	April 7,	Sept. 25,	170	No. . .	*	*
No. . .	1	None.	49	52	July 22,	July 26,	4	No. . .	1,100	*
No. . .	1	None.	17	17	July 20,	July 31	10	No. . .	900	*
No. . .	1	None.	6	6	Oct. 31,	Oct. 31,	None.	No. . .	§	§
No. . .	1	15	34	400	Dec. 30, 1888,	Jan. 31,	365	No. . .	*	*
No. . .	1	8	56	271	Sept. 8.	Sept. 16.	8	No. . .	3,300	450
No. . .	1	†	7	7	Aug. 29,	Aug. 29,	1	No. . .	None. .	None.
No. . .	1	10	2,000	7,500	May 12,	May 22.	10	No. . .	170,000	*
Yes. . .	1	3½	360	410	July 18,	July 22,	4	No. . .	3,800	None.
No. . .	1	9	35	175	Sept. 8.	Sept. 17,	9	No. . .	1,800	*
Yes. . .	1	None.	181	230	Aug. 9.	Aug. 9.	None.	No. . .	10,000	11,270
Yes. . .	1	10	1,200	2,500	Mar. 11,	Mar. 21,	10	No. . .	22,500	None.
Yes. . .	1	13	750	900	Aug. 30.	Sept. 15,	16	No. . .	23,400	4,000
Yes. . .	1	30	66	132	June 3,	July 2,	30	No. . .	8,570	*
Yes. . .	1	7	60	410	July 3,	July 10,	7	No. . .	700	4,000
Yes. . .	1	6	40	150	July 1.	July 7,	6	Yes. . .	1,500	*
No. . .	1	5	20	20	Aug. 3.	Aug. 8,	5	†	250	None.
No. . .	1	1	75	75	Aug. 25.	Aug. 25,	1	Yes. . .	200	None.
No. . .	1	10	40	540	Sept. 8,	Sept. 18,	10	No. . .	6,500	1,000
No. . .	1	17	45	125	Sept. 24,	Oct. 13,	17	No. . .	1,400	750
No. . .	1	8	100	300	Sept. 8.	Sept. 17,	8	No. . .	4,350	3,000
Yes. . .	1	None.	7	10	Aug. 1,	Aug. 1,	None.	No. . .	500	500
No. . .	1	None.	54	54	June 1.	June 1.	None.	No. . .	588	5,000
No. . .	1	None.	45	45	July 1,	July 5,	4	No. . .	*	None.
No. . .	1	1	85	110	Nov. 3,	Nov. 3,	None.	No. . .	85	20
Yes. . .	1	180	400	400	May 1,	Feb. 2, 1891	180	No. . .	189,000	*

\* Not estimated.

† Lost their position.

‡ Partly.

§ Men replaced by others.

## STRIKES AND LOCKOUTS

INDUSTRIES AND YEARS.	LOCALITY.	CAUSE OR OBJECT.
1890.		
Plasterers, . . . . .	Pittsburgh, . . . . .	For increase of wages, . . . . .
Glassworkers (boys), . . . . .	Pittsburgh, . . . . .	For increase of wages, . . . . .
Glassworkers (lockout), . . . . .	Grapeville, . . . . .	Against performing more work for same rate of wages, . . . . .
Glassworkers (lockout), . . . . .	Beaver Falls, . . . . .	Men objected to discharge of some of their number, . . . . .
Glassworkers (lockout), . . . . .	Pittsburgh, . . . . .	Men objected to increase of work, . . . . .
Salesmen and saleswomen clothing trade, . . . . .	Pittsburgh, . . . . .	For shorter hours and to secure observance of holidays, . . . . .
House painters, . . . . .	Pittsburgh, . . . . .	For increase of wages, . . . . .
Boilermakers and helpers (general strike), . . . . .	Pittsburgh, . . . . .	For reduction of working hours, . . . . .
Employés barbed wire works, . . . . .	Allentown, . . . . .	Firm refused to recognize labor union, . . . . .
Rolling mill employés, . . . . .	Reading, . . . . .	For increase of wages, . . . . .
Ironworkers, . . . . .	Scottdale, . . . . .	For increase of wages, . . . . .
Coal miners, . . . . .	Stockdale, . . . . .	For increase of wages, . . . . .
Coal miners, . . . . .	Lucyville, . . . . .	For increase of wages, . . . . .
Coal miners, . . . . .	Monongahela City, . . . . .	Against employer's rule, . . . . .
Coal miners, . . . . .	Monongahela City, . . . . .	Against working with Italian miners, . . . . .

—Continued.

Ordered by labor organization.	ESTABLISHMENTS.		Number of persons engaged in strike.	Number of persons involved in strike.	Beginning.	End.	Duration—days.	Succeeded.	Loss.	Employer's loss.
	Number.	Days closed.								
Yes, .	*	6	308	408	Aug. 1,	Aug. 7,	6	Yes, . .	\$8,844	*
No, . .	. . .	2	500	500	April 12,	April 14,	2	No, . .	3,800	*
No, . .	1	7	50	50	Feb. 12,	Feb. 19,	7	†	700	*
No, . .	1	7	60	60	Feb. 16,	Feb. 23,	7	†	840	*
No, . .	1	14	100	100	April 19,	May 3,	14	†	2,800	*
Yes, .	4	5	300	330	Nov. 1,	Nov. 6,	5	Yes, . .	3,600	*
Yes, .	*	12	54	54	Mar. 1,	Mar. 12,	12	Yes, . .	1,620	None.
Yes, .	*	18	800	800	July 18,	July 18,	18	Yes, . .	50,000	*
Yes, .	1	24	38	358	July 1,	July 28,	24	No, . .	6,700	\$2,500
Yes, .	1	6	90	180	July 28,	Aug. 2,	5	No, . .	4,300	None.
No, . .	1	2	7	130	Aug. 8,	Aug. 9,	2	No, . .	395	*
Yes, .	1	42	170	170	Sept. 22,	Nov. 17,	42	†	11,760	2,100
Yes, .	1	22	60	130	Sept. 24,	Nov. 15,	22	†	3,600	600
No, . .	1	5	200	450	Dec. 5,	Dec. 10,	5	No, . .	3,500	700
No, . .	1	14	200	440	Dec. 1,	Dec. 15,	14	No, . .	6,000	1,200

\* Not estimated.

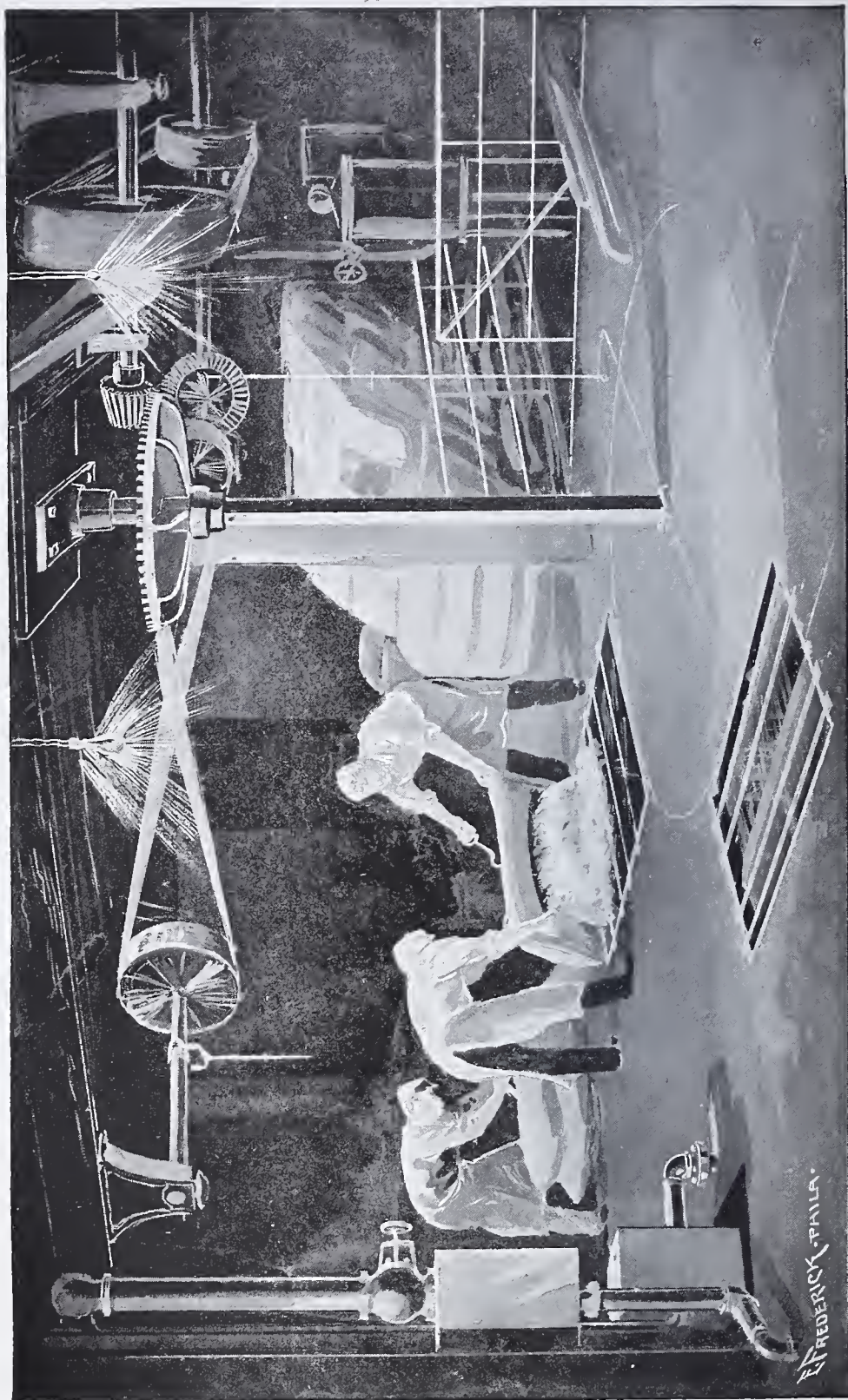
† Partly.

‡ Men succeeded.









FREDERICK-PAILA

## SUGAR REFINING IN PENNSYLVANIA.

---

An old chronicler wrote, many years ago, "of that delicious comfit men call sugar." The superficial observer of to-day never considers how much is owed by the people to the enterprise of sugar refiners in embarking vast sums of money in their costly plants; and to their skill in so minimizing the cost of refining, that the article which once was only a luxury for the tables of the wealthy, is now so cheap that it has become a necessity for the tables of the poorest. And if the sugar refiner has had his reward, those who know the business, the vast sums of money involved in its conduct, and all its perils and risks, will concede that it has been well earned.

If any one will consult a Philadelphia directory of fifty years ago, he will find in that small volume, under the trade subdivisions, several firms of sugar refiners. And if any one could see their establishments of fifty years ago and compare them with the immense structures of to-day, there would be found the same tremendous advance in machinery, scientific application, and extent of manufacture, which characterize the last half century in almost every department of manufacturing life.

In old times there seemed to be no ambition for the location of the sugar refinery except in the cheapest place up a back street. Here the business was carried on in an insignificant way, and then the *cost* of manufacture much exceeded the *price* of granulated sugar to-day. Even thirty years ago, the difference between the cost of raw and refined sugar was in excess of the present price of granulated sugar. That is, under the old method it actually cost more to refine sugar than it now does to grow it, transport it and deliver it to the consumer.

There was a sugar refinery in St. John street, one in Zane street and another at Crown and Willow streets; and in such places, by rude and unscientific methods, the refining business had its start in the United States.

In those days, the popular taste was for raw or unrefined sugar. Cuba and Porto Rico, with the Louisiana crop, supplied very largely the wants of the country. It is hardly an exaggeration to say that at the present time there are one or two establishments which refine as much sugar in an hour as any one of the old-fashioned affairs of fifty years ago could refine in a week.

In 1866 the first sugar refinery was built upon the Delaware; and since then no one in this business would think of leaving the water-



front. In Boston, New York, Baltimore and Philadelphia, every one seeks to place his establishment to the best advantage for the receipt of his raw material and the shipment of his production. And this can only be attained by the junction of rail and wharf facilities.

In Philadelphia there are now the Franklin Refinery; the large establishment recently erected by Mr. Spreckles; that of Messrs. E. C. Knight & Co., and the Delaware Refinery. Their united business is enormous. The largest of them uses more raw sugar every year than the States of Louisiana and Texas produce; indeed, one of them uses more raw sugar every year than is produced in the United States. The simple statement of such a fact carries its own astonishing meaning without going into detail.

The grades of sugar are determined in two ways:

1st—By their color; and

2d—By their saccharine strength.

The latter is the scientific method and the one which is coming into use all over the world. In old times color was the standard of value, “the lighter the color the better the sugar” being the adage.

Passing from this general history of sugar refining in the state, we shall next describe the process of refining sugar. For this purpose we shall select the Franklin Sugar Refinery, because it is the largest if not the oldest refinery in the state, and it is believed, executes the process with unsurpassed intelligence and economy. The ground occupied by the buildings is about three and a half acres, while their height ranges from three floors to eleven, or from fifty to one hundred and fifty feet. Their combined area, if on one plane, would cover eleven acres. The buildings can be most intelligently described after the process of refining.

The Franklin Sugar Refinery is situated directly on the Delaware river front, and both steamers and sailing vessels may be seen daily unloading their immense cargoes of raw sugar brought from all the sugar producing countries of the world.

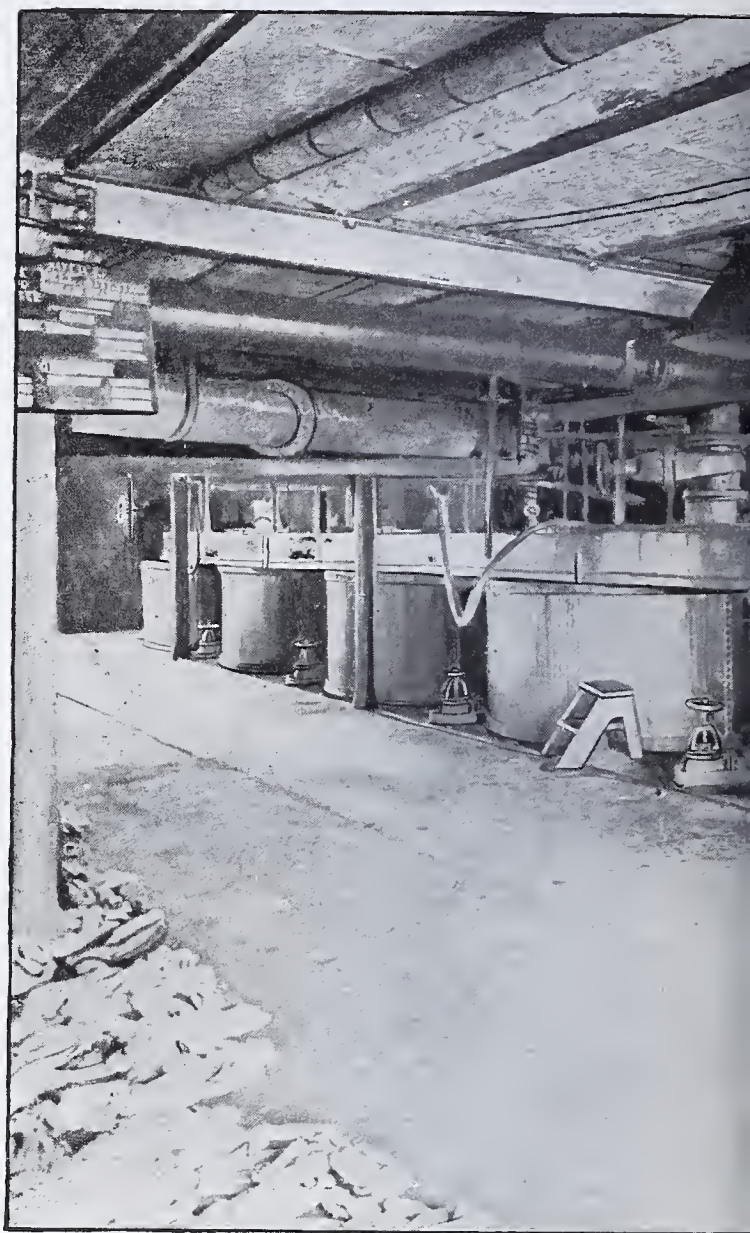
The raw sugar is of all grades, and varies very considerably in appearance. The better qualities consist of comparatively large and well formed crystals of a light straw color, the very inferior ones of a pasty chocolate-colored mass almost equal in consistency to half set glue. Between these two extremes sugars of all possible intermediate degrees of purity exist, and are handled daily in the refinery. The inferior sugars contain sand and dirt, in quantities difficult to imagine, until it is actually seen piled up in one large heap within the refinery walls.

By far the larger part of the raw material is obtained from the West Indies, Brazil, Demerara and the East Indies. Large cargoes of raw beet sugar arrive more or less frequently from Germany, and many other countries are represented at intervals.

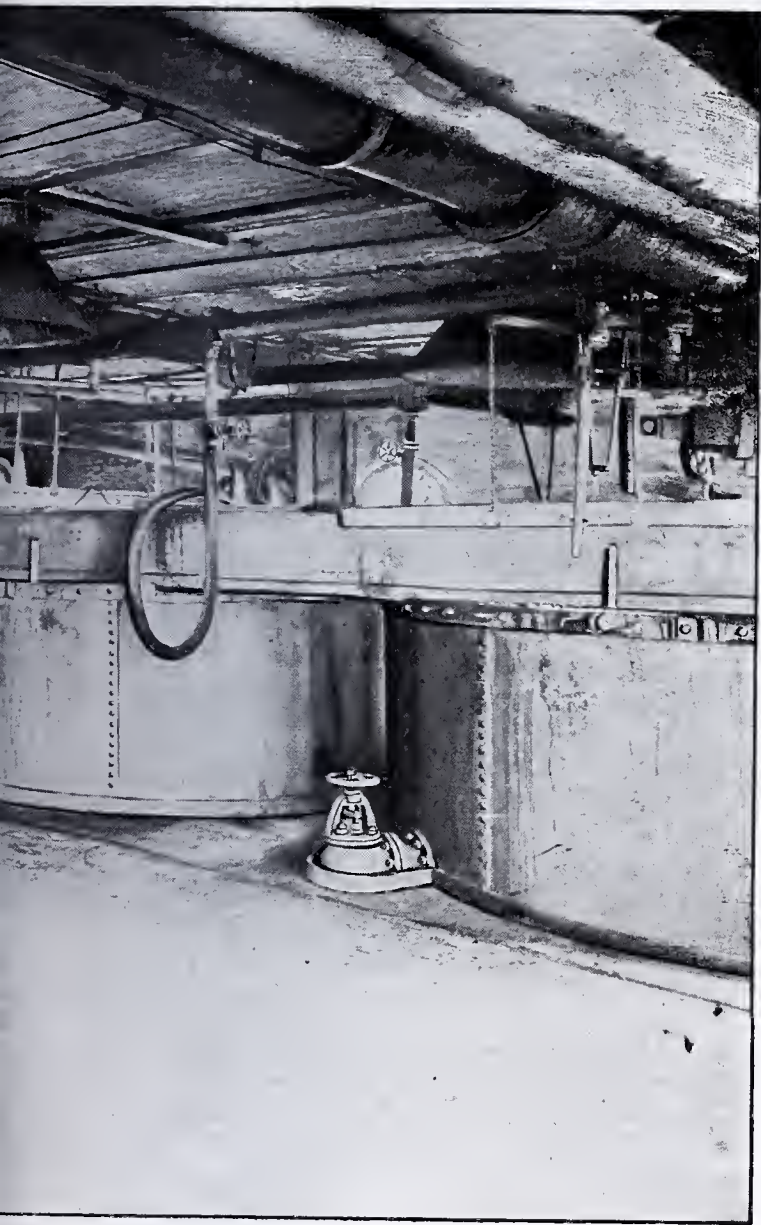
In the manufacture of the raw sugar, the juice is extracted from the







DEFECATING TANKS FOR FIRST



TREATMENT OF SUGAR SOLUTIONS.





properly ripened canes by submitting them to considerable pressure exerted by heavy rollers constructed for the purpose. The juice is then concentrated by evaporation and the sugar crystallizes out. The methods of purifying and evaporating the juice, and of separating the crystals of sugar from the syrup enclosing them, are still in many places of the crudest and most primitive description; but most of the more intelligently managed plantations have adopted the more scientific methods and appliances of the refiners, and have thus not only materially increased the yield of sugar, but vastly improved its quality. The vacuum pan, the centrifugal machine, etc., are now as essential to the successful working of the advanced plantation as they are to the needs of the refiner.

Adjoining the buildings large stacks of raw sugar may be often seen awaiting the refining process. Hundreds of tons in bags, barrels, hogsheads, baskets or mats, are thus frequently exposed.

Day and night, operations continue with almost equal activity from year's end to year's end, being suspended only at or near twelve o'clock on Saturday night, to be resumed no less vigorously twenty-four hours afterwards.

The men employed work alternately day and night during successive weeks, each having his partner who, during the hours of his absence, performs precisely the same work in the same department. Thus, before the men pass out of the buildings after their day or night's labor, others are already in their places at work.

The essential features of the refining process may be described in a very few words. The raw sugar is dissolved in hot water and the dark brown—sometimes almost black—solution obtained is decolorized by filtration over bone-black, after first undergoing a process of straining by which sand and other insoluble impurities are removed. The clarified and decolorized "liquor" is then deprived of its water by evaporation and the sugar is again obtained in a solid form.

But while the refining process is essentially a simple one, it is not by any means as simple in practice as might be inferred from the above outline of the operations involved, and in attempting to carry them out, unlooked for difficulties are encountered at every step.

Since the introduction of bone black in the sugar industry in 1812, the essential features of sugar refining have undergone no change; but while in principle the process remains unaltered, in practice it has been gradually revolutionized by the mechanical improvements which have since been made.

The refining commences in the basement of the lofty buildings immediately overlooking the river front. Numbers of men are here actively engaged in hauling the raw sugar to the "melter," and scarcely before the visitor has had time to understand the first stage of the process, several tons of sugar have disappeared through the gratings in the

floor, falling into a large tank below placed there for its reception. The sugar here encounters the hot water by which it is dissolved, and having now passed into solution, forming what is technically called "liquor," is a few minutes afterwards pumped up to the top of the highest building a distance of 160 feet.

It may be well at this point to refer to one of the difficulties the refiner has to encounter, and which, if not properly guarded against, may result in considerable loss. Sugar in solution can under favorable conditions be again entirely obtained in a solid form by simply evaporating off the water in which it is dissolved. Impure solutions are, however, very apt to undergo a change, with the result that in place of sugar an excess of syrup is formed on evaporation, which will not crystallize and can only be sold at a sacrifice. The change here referred to is brought about by a variety of causes, amongst which may be mentioned unnecessary delay in carrying out the refining process. When once operations have been commenced, they should be pushed day and night, and completed as rapidly as possible, if the best results are to be obtained.

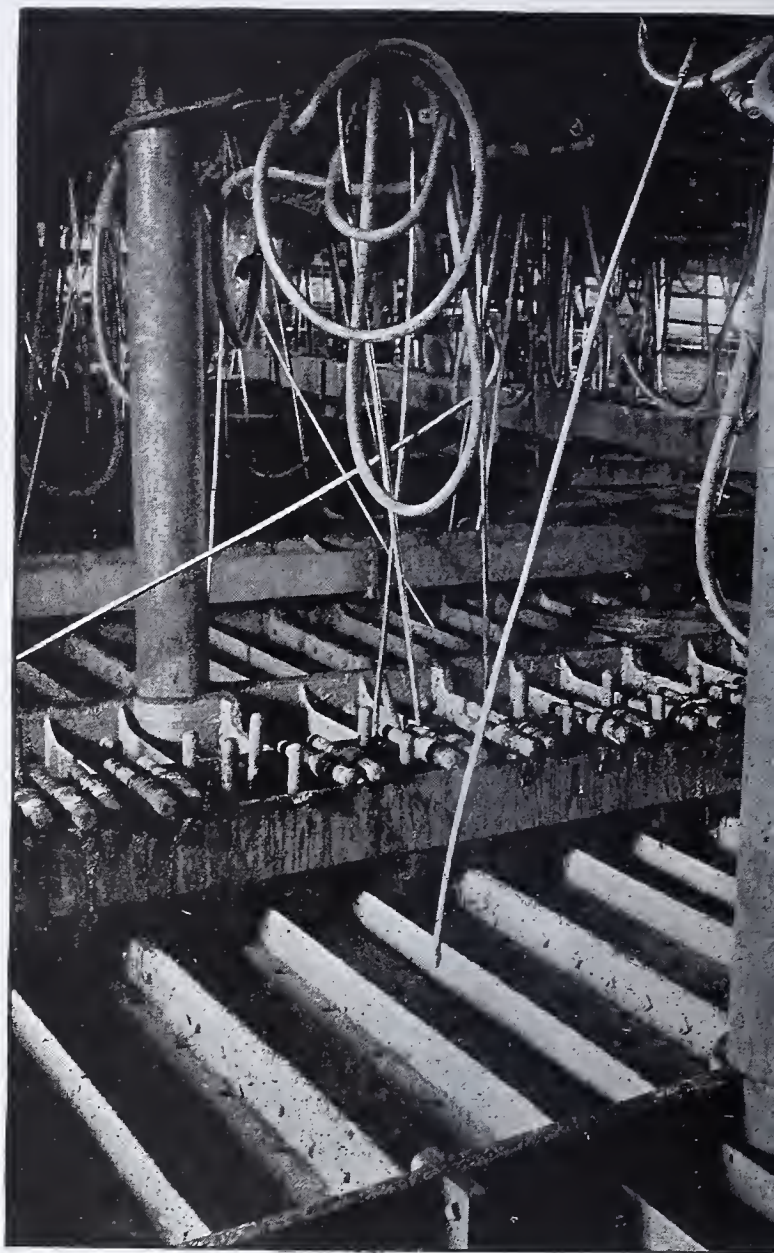
Following the "liquor" on its upward journey, the visitor arrives at the eleventh story, where he finds a number of large circular tanks. In one of these he sees flowing in considerable volumes a dark colored liquid, not at all unlike very muddy coffee.

After being heated on this floor the liquor gradually begins its downward descent by gravity, and as it passes from story to story the impurities are left behind. It is first strained by passing through suspended bags, which collectively form a gigantic filter. All solid substances are retained in the bags, and as one passes on an opportunity is frequently afforded of seeing the impurities thus removed. Bags which have just been in service are being turned inside out as a preparatory measure to being washed, and the filth exposed astonishes all who see it. As the workman gives each bag a shake during its passage through his hands, not one fails to contribute its share to the heap of indescribable dirt which is to be frequently seen collected in this department.

Although the operations of washing and handling the bags are conducted with considerable manual skill, everything in this department strikes the visitor as being far behind what he sees elsewhere in the refinery. There is, in fact, probably no other portion of the refining process which presents so many difficulties, has attracted so much attention, and upon which so many thousands of dollars have been spent with a view to improvement.

Upwards of 14,000 bags are used here daily, each bag affording a filtering surface of 25 square feet. This enormous number is required on account of the peculiarly gummy nature of the impurities in the sugar the pores of the bagging becoming so rapidly clogged that after a few gallons of liquor have passed through each bag no effort will induce





TOP OF THE





G FILTERS.



more to flow. But while unquestionably primitive, costly and inconvenient, bag filtration properly conducted is thoroughly effective; and the "liquor" which before passing to the bags appeared almost hopelessly muddy, flows from them perfectly bright.

Descending a little further the visitor finds himself among the bone-black filters. These are immense cylindrical vessels nearly two stories high and each capable of holding about fifty tons of bone-black. Standing here for the first time in the very midst of fifty of these gigantic filters, and with the knowledge that there exists even a greater number in the adjacent buildings, one cannot fail to be impressed by operations conducted on so immense a scale.

A stream of bone-black may be seen at any time flowing steadily into one or other of the filters. It is extremely porous, preserving in this respect the character of the bone, upon which property much of its efficiency depends. It is used in the form of small grains which have been carefully sifted to the desired size, and the largest of which would probably not exceed an eighth of an inch in any dimension. It is free from dust and scarcely soils the hand in taking it up.

As soon as the filters are filled the liquor is allowed to flow into them until it completely fills up all the space between the grains of black, expelling at the same time much of the air from the pores of the grains themselves. When all available space is occupied, the liquor is allowed to flow out slowly from the bottom, its place being immediately taken by a fresh quantity from above. The liquor then continues to flow steadily through the immense columns of black. Nothing can be more remarkable than the wonderful decolorizing power possessed by this useful substance. The contrast between liquor before and after contact with it, is so striking that it scarcely seems possible that so extraordinary a change can have been brought about by such simple means. The action of the bone-black though very imperfectly understood, appears to be principally mechanical. It removes or absorbs the coloring matter rather than destroys it, and as a consequence the more impurities it has absorbed the less perfectly it does its work, until finally it becomes so thoroughly saturated that it can no longer be used profitably. The "spent" or exhausted bone-black can by proper treatment be restored to its former condition of activity, and the whole of the remaining four stories in the building are set aside for this purpose. After thorough washing, the black is dried and then heated in retorts to a red heat. The coloring matter which washing has failed to remove is destroyed by the heat, and the bone-black is now again ready for use.

The mechanical arrangements in this department are surprisingly perfect, and nothing can exceed the ease with which the black passes through its cycle of operations. Everything connected with the revivification of the bone-black is connected automatically; an ingenious mechanical contrivance regulates the rate at which the black is admitted



and discharged from the kilns; a conveyor belt conducts it to an elevator which, after carrying it up through eight stories, throws it on a system of belts by which it can be delivered to any particular filter at will. Every day nearly 1,500 tons of bone-black are washed, dried, burnt and re-distributed to the filters, a result accomplished with an almost entire absence of labor, thanks to the perfection of the machinery employed, and the skill with which it has been arranged.

Although bone-black may be used over and over again for months it deteriorates after it has been long in service; and in order that its quality may not be subject to very great variations at different times, it is customary to frequently add small quantities of new black to the stock and also to discard at intervals from it. Most of the discarded black is used in the manufacture of fertilizers, and thus the phosphoric acid which has been removed from the soil by the plants, consumed and appropriated by the animals to build up their frame, is once again returned to the ground.

Leaving the bone-black the visitor is conducted to another building in which the refined sugar is made. He sees here for the first time the vacuum pans with which, however, he is probably already familiar by name. They are immense circular vessels about twelve feet in diameter, made entirely of copper, and surmounted by a huge copper pipe for the purpose of conducting away the steam formed in the process of evaporation. They are occupied internally by a mass of coils which furnish the heat while the boiling is in operation. Each pan is connected with a powerful air pump which keeps up a good vacuum within, and the steam formed is rapidly condensed so that the pressure from this source may be kept as low as possible. On leaving the bone-black filters the liquor flows over by gravity to the pan-floor, is then drawn into the pans, and the boiling for sugar commences.

By conducting the operation under reduced pressure the evaporation is effected very rapidly, and what is still more important, at the lowest possible temperature. The longer a solution of sugar is heated, and the higher the temperature to which it is exposed, the darker it becomes; hence the old-fashioned method of boiling in open pans placed directly over a fire is fatal to the production of many of the higher grades of sugar which the existence of the vacuum pan has rendered possible. The boiling point of a concentrated solution of sugar may, under ordinary atmospheric conditions, soon reach a temperature of 235° F., and may easily rise much higher, whereas with a good vacuum and good sugar, a temperature of 125° F., or even less is sufficient to maintain active ebullition. The advantages of the vacuum pan thus become apparent and cannot be well over-estimated.

The successful production of the various kinds of sugar depends upon the skill and experience of the boiler, who, by slightly altering the conditions under which the crystals are formed and allowed to grow, is able to produce at will any of the modification she may require.







LOOKING INTO BAG



ERS SHOWING BAGS.





By the time the boiling is finished, the liquor has been converted into a thick paste consisting of sugar and syrup so intimately mixed and so sticky, that the separation of the one from the other suggests considerable difficulty. As one passes down to the floor below where this is accomplished by the centrifugal machines, it is often possible to see the contents of a pan, in the act of being discharged, flowing down an inclined plane into a large vat which supplies the centrifugals below. The sight is interesting and will not be forgotten.

There is probably no portion of the refining process which is more striking or successful than the separation of the sugar from the syrup by means of centrifugal force. Nearly one hundred machines are kept almost constantly rotating, stopping only every few minutes to take in a fresh charge.

The centrifugal machine is as simple as it is effective. It consists of a cylindrical basket rotating in a vertical shaft. The sides of the basket are closely perforated with small holes which, while allowing the free passage of the syrup, are sufficiently small to retain the crystals of sugar within the basket. The machine is charged and then set in rapid rotation; almost instantly the mixture of sugar and syrup creeps up and spreads itself out uniformly over the wall of the basket, leaving the bottom perfectly clean. As the rotation proceeds a shower of syrup may be heard pelting with considerable force against an outer immovable drum encircling the rotating cylinder. When the bulk of the syrup has passed off, water in small quantity, is poured on the still revolving sugar, and this as it passes through to the outer drum carries with it the last traces of syrup adhering to the crystals. When the machine is stopped, the sugar is found clean and almost dry adhering to its walls. It is easily dislodged from its position and falls through the bottom of the basket in which an opening can be made at will, to be carried by elevators and conveyor belts to the warehouse in which it is finally packed for the market.

The syrup thrown off by the centrifugal machines is boiled over a number of times until ultimately, when no more sugar can be extracted from it, it is packed in barrels and sold as refiner's molasses.

The refined sugar is packed entirely in barrels which pass into the refinery almost without interruption from morning to night at the rate of eight to nine a minute.

In thus briefly glancing at the refining process, no mention has been made of the many departments which are only indirectly connected with it. The electric-light station, the plant for pumping and purifying the river water, the boiler houses, the chemist's laboratory, etc., etc., are all full of interest and would repay study.

Every day, from five to six, representing about one thousand tons of sugar are refined. This enormous quantity is distributed throughout the entire United States and there is scarcely a city of importance,

north, south, east or west, which does not consume considerable quantities of the Franklin sugars.

Having described the process of refining we may now return to a more extended description of the buildings in which the work is conducted. The first series of three buildings is known as the "C" house block, and consists of two filter and kiln houses and a boiler house. One of these buildings is called the "Filter House Extension," and has an area of about seven thousand six hundred square feet, and is eight stories high. It contains twenty-four filters, or bone-black tanks thirteen feet in diameter, which holds about twelve hundred tons of black. The kilns for revivifying this enormous quantity of material are on the lower floors of the same building. There are sixteen of them, and contain one thousand and twenty-four retorts. The filters occupy two floors, and the kilns two more, while the remaining floors are occupied with the flues from kilns, and the necessary machinery for elevating, distributing and drying the bone-black. This building is of great strength, as it is designed to carry another tier of filters above those now there, as well as tanks and other appliances. It may be also stated that a portion of the first floor of this building is for the use of the riggers. This department is a very important one in which a large number of men are employed. Their duties are to unload heavy machinery from cars and trucks and convey them to the places they are to occupy in the refinery. This is sometimes exceedingly difficult, as the street must not be blocked or the operation of the work suspended. It is not an usual thing to see a hung tank suspended in mid-air seventy-five or a hundred feet from the ground slowly moving to the roof of a lofty building, or to some other place for final location. In the erection of pipe, or in the setting of engines and pumps on their foundations, the riggers play an important part

The next building in this block was the first erected of the three mentioned. It has eleven stories and contains the same number of bone-black filters and kilns as the filter house extension, and is of the same capacity. The floors above the seventh are occupied with storage and heating tanks for the treatment of the liquor. In the cellar of this building is located one of the "melters," or apparatus for liquifying the raw sugar. This consists of a large circular tank, the top of which is level with the cellar. It is provided with revolving arms, and rollers for breaking up and separating the compact masses of raw sugar. This apparatus is very strongly built and is driven by a steam engine. In this building is also placed the bag filters, which have already been described. The appliances for conveying the bone-black from the filters to the kilns, as well as the machinery for elevating it from the kiln after calcination and conveying it again to the filters is similar to that used in the filter house extension, consisting chiefly of belts and buckets running over suitable pulleys. The proper size and shape of these buckets, as







TOP OF BONE BLACK FILTERS SHOWING  
ARRANGEMENT OF PIPES ABOVE FOR





OW BONE BLACK IS PUT IN FILTERS AND  
TRODUCTION OF LIQUOR AND WATER.



well as the size of pulleys and speed of belts have been determined by a careful study and experience. The temperature of the black is watched and regulated by special machinery somewhat like the condensing apparatus of a marine engine.

A portion of the first floor of this building is set apart for a store room and a receiving room. It is a very busy department of the works, and persons are constantly engaged here in receiving and distributing material. Teams of various kinds may be here seen delivering miscellaneous material, such as pipe, valves, shafting, pulleys, oil, tallow, rope, rubber, packing of all kinds, bolts and nuts, iron casting of all shapes and weights made from patterns constructed at the refinery, electrical supplies, wire cloth, pumps, traps, etc.

The third building of this series is the boiler house which contains five batteries of boilers of 2,150 horse power. They are safety boilers of the water tube type, and the gases are conveyed by ample flues into a brick chimney lift, eleven feet and nine inches in diameter and one hundred and seventy-eight feet high. This chimney also receives the gases from kilns of the "C" house already mentioned. It is lined with fire brick and rests on a compact stone foundation. The heat from the spent gases passes through two economizers, or feed water heaters of the most improved kind, and the flues are fitted with dampers operated by machinery which can instantly turn the gases directly into the chimney should any leakage or other accident happen to the economizer. The apparatus for furnishing coal to the boilers is worth describing. The coal elevator is located at the back of the scales, and as the coal is weighed the cart is pushed back a couple of feet and the contents are dumped into the boot. The elevator, which is constructed of metal link belting with suitable buckets, carries up the coal as fast as it can be supplied. At the elevator head the coal is received into a bin from which it runs out into a conveyor. This conveyor consists of a metal trough with a glass bottom provided with scrapers or flights and driven with a wrought iron link chain of a special design. The scrapers carry the coal along the trough, which is suspended over a large brick and iron bin capable of holding about five hundred tons. In the bottom of the trough are slides, arranged at suitable intervals, by which the coal can be finally distributed into the bin. At the bottom are large cylindrical iron spouts through which the coal is guided to the firing floor, forming convenient piles for the firemen, as the natural slope of the coal and the distance from the floor to the bottom of the spout prevents any more from coming down than is needed. The ashes are elevated to a bin through which it is elevated into carts and carried away. In the basement of this building, which is on a level with the street, is located the principal machine shop, which includes the coppersmiths and blacksmiths' shop and tool room. It is well equipped with lathes, planing, shaping and drilling machines. In the blacksmith shop are the forges,



which are kept constantly going. A corps of machinists are constantly employed in the repairing and the erecting of machinery.

The next block to be described is known as the "B" house, in which the secondary processes of refining are carried on. This block contains four buildings, the most important of which is called the New Pan House. It is a nine story iron and brick building and contains 4,850 square feet of area. In the basement is a finely proportioned steam engine of one hundred and forty horse power, which drives the centrifugal and other machines already mentioned. Here also are three large duplex pumping engines having a combined capacity of eighteen millions of gallons in twenty-four hours. This water is mainly used for condensing purposes connected with the vacuum pans, but does not represent the entire pumping capacity of the works. The other pumps, which are not in this building, will be described elsewhere. A part of this cellar is occupied with dressing and bath rooms for the men. The second floor is occupied with syrup tanks, of which there are twenty-two, having a combined capacity of sixty thousand gallons. They are made of cast iron and have an elaborate system of gutters and pipes for conveying syrup. In addition to these storage tanks there are some others called mixers, in which the syrup is heated and its density regulated, after which it is pumped into other vessels for future use. All the piping through which the liquor or syrup is passed is made of copper. From this floor we ascend to the centrifugal floor which contains fifty-four machines of different capacities. Their action is as noiseless as many of the operations of nature, and the only sounds heard are those caused by the starting and stopping. They revolve about fourteen hundred times a minute, and, like miniature worlds, pursue their work night and day. The floor above this contains the receiving tanks, or coolers, which are of wrought iron of large dimensions, resting upon beams with their tops level with the floor line. There are five of them, and each is equal to the capacity of a vacuum pan above. Their function is to receive the boiled sugar from the pans and to distribute it to the centrifugal machines below through suitable outlets bolted to the bottom of the cooler. The sugar is kept agitated in the cooler by means of a special stirring apparatus worked by powerful machinery. The boiling processes are carried on in the fifth floor of this building. The pans used are made of copper, very thick and strong, four of them have each a capacity of about 150 to 175 barrels of refined sugar. The fifth is somewhat smaller, and is used for boiling the syrup. They are fitted internally with copper coils for the admission of steam, which is the only kind of heat used in boiling. There are valves on the outside of the pans which govern the action of the steam. There are also automatic valves which regulate the pressure, or what is more properly sought, the temperature. The tops of the vacuum pans are connected with the condensers. These are cast iron cylinders, six feet in diameter







BOTTOM OF E



E BLACK FILTERS.





and about twenty-five feet high, the tops of which are furnished with spray pipes through which cold water is precipitated upon the vapor. After the condensation has taken place the water is carried through pipes, suitably trapped, into a tank in the cellar through which it discharges into the Delaware.

In connection with the condensers are air pumps which serve to extract the air from the water by condensation, and otherwise assist to perfect the vacuum. They are located on the sixth floor of the building over the pans. They are of the duplex fly-wheel pattern, and are considered the most perfect pumps for the purpose. Although the theory of boiling in vacuo is well known and understood, the mechanical appliances for the utilization of the process in crystallizing sugar involves great delicacy of action and much watchfulness. From the time that the liquor enters the pans, until it is turned into the coolers, the tests are unremitting, not only the temperature of the steam, but also the amount of water going through the condenser must be varied continually, and both the eye and touch of the operator are brought into constant use in testing the sugar. On the same floor as the vacuum pans are the tanks that contain the liquor to be crystallized. There are eight of these tanks with a combined capacity of about fifty thousand gallons. The sugar after leaving the pans is received upon copper-lined troughs about five feet wide. These troughs are pivoted, and can be directed at different angles towards the coolers. The process here seen is very beautiful, a stream of thick sugar, sometimes white, and sometimes amber, slowly flowing out of the troughs into the coolers. The thick substance has not time to level itself all at once, and hill rises upon hill in quick succession until the cooler is full, then the stirring commences, and soon after the undulating mass is converted into a uniformly level one, gradually becoming lower, until all trace of it with its clear smooth surface disappears into the centrifugal machines. The seventh, eighth and ninth floors are designed for wagons for storing certain grades of sugar, and on the seventh floor is also located the "condenser tank" which is a large cast iron box into which the water is received that is used in the condensers. It is provided with contrivances to tranquilize the water, and separate the air from it as much as possible.

The next building in the B house block is called the "Old Pan House." As its name might imply, it is of earlier date than the other. It has an area of about 2,400 square feet, and is seven stories high. The cellar contains a melter for raw sugar, similar to the one described in the C house; it also has two plunger pumps for pumping the liquor to the eleventh floor of the C house. These pumps are of the vertical type, and are very strong. The discharge pipe is ten inches in diameter. This will give some idea of the volume of liquor that is conveyed. There are many bridges and tunnels connecting the various buildings, which will be described later. There are also two large hot water pumps located in this

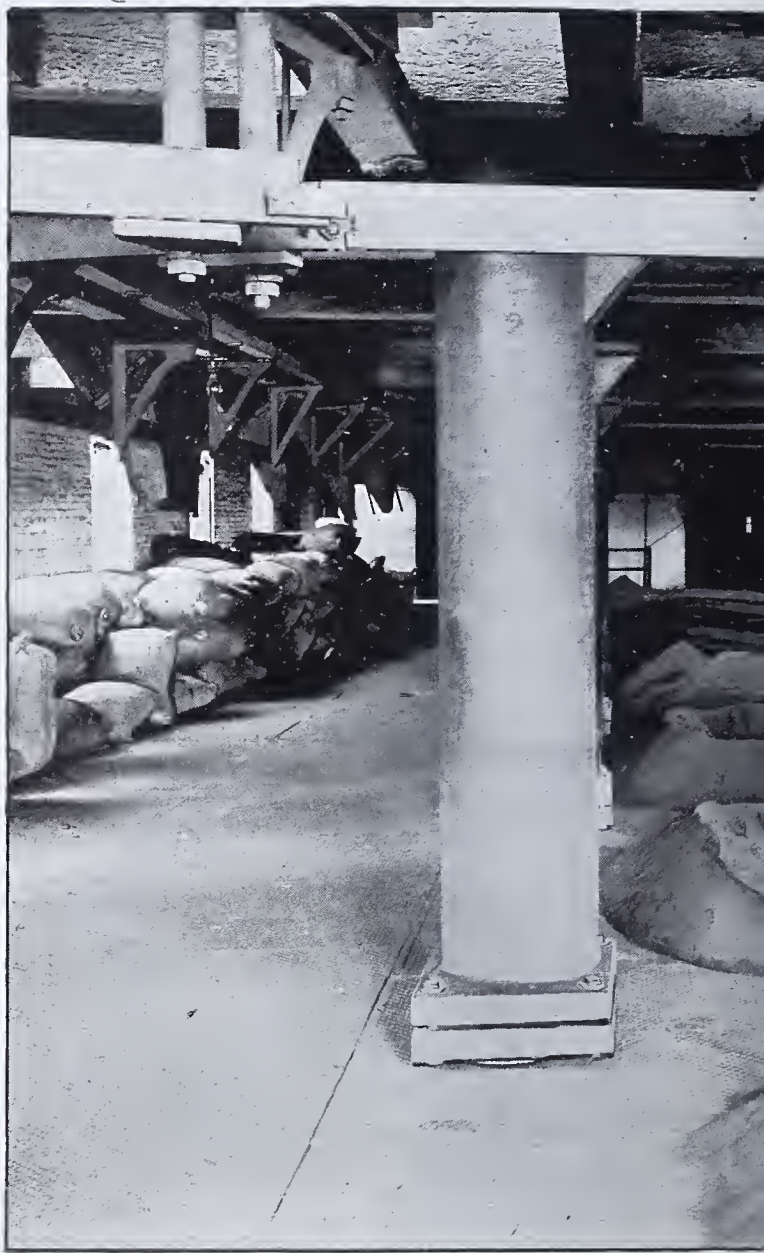
cellar. They are of the duplex type and have combined capacity of 1,250,000 gallons in twenty-four hours. The water that supplies these pumps is collected and heated in a covered tank seven feet square and nearly one hundred feet long. This tank is fitted with special apparatus for utilizing the heat from exhaust steam, and does its work very satisfactorily. An idea of the immense quantity of hot water used in the refining processes may be had, from knowing that the two pumps referred to have each a twelve-inch discharge, and that both of them are kept continually working. The water is received into two tanks on the eleventh floor of the C house, each of a capacity of twenty-five thousand gallons, where it is further heated, and run down by gravity to the places where it is used. Besides these two, there are other hot water pumps in various places. On the first floor of the old pan house, is located the steam engine for driving the machinery in that building, also the syrup tanks, where the filling of the barrels with syrup is carried on.

The third floor of this building is occupied with centrifugal machines, similar in size and style to those in the New Pan House. There are twenty-four of them, and they are arranged in one row. Above them are the coolers which are supplied by four twelve-foot pans, of similar design and capacity as those in the New Pan House. There are condensers and air pumps connected with these pans as for the others, and the sizes and styles are alike in both houses. When the sugar leaves the centrifugals, it is conveyed into elevator boots on the level of the third floor of the New Pan House. There are four of these elevators which carry up the sugar and deposit it on conveyor belts. These conveyors are located on a wide bridge which is very substantially built of iron, and connects the New Pan House with another building called the warehouse, which will be described in its turn.

On the seventh and last floor of this building are located the Multiple Effects. These are apparatus for utilizing the latent heat in steam for the purpose of reclaiming the sugar held in sweet water, of which there are of necessity many thousand gallons produced daily. They are cylindrical vessels mounted horizontally upon suitable framing resting upon columns, and resemble locomotive boilers. They are connected with condensers and air pumps, and, together with the necessary liquor pumps and tanks, form a very extensive plant.

The next building in the block is called the "Old Filter House." It has an area of about 3,650 square feet, and is a nine story iron and brick structure. The ninth floor contains elevating machinery and cooling apparatus in connection with the bone-black, of similar design and capacity to that used in the C house and filter house extension. The eighth and seventh are occupied with a set of triple effect pans, like those used in the old pan house already described, and with their condenser, air pump and other pumps and tanks take up the floor. The sixth floor is taken up with liquor tanks of which there are twelve,



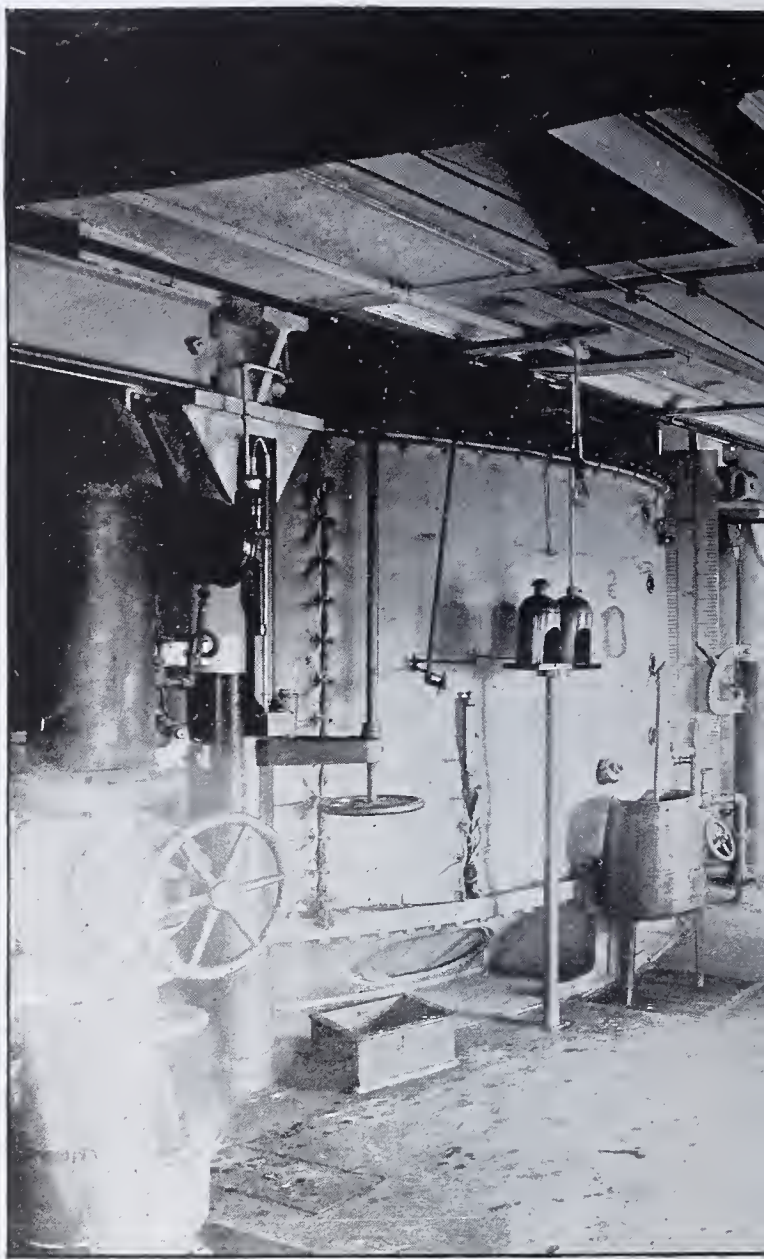


TOP OF DRYERS FOR PRELIMINARY DRYING  
IN R





OF BONE BLACK BEFORE IT IS REVIVIFIED  
ORTS.

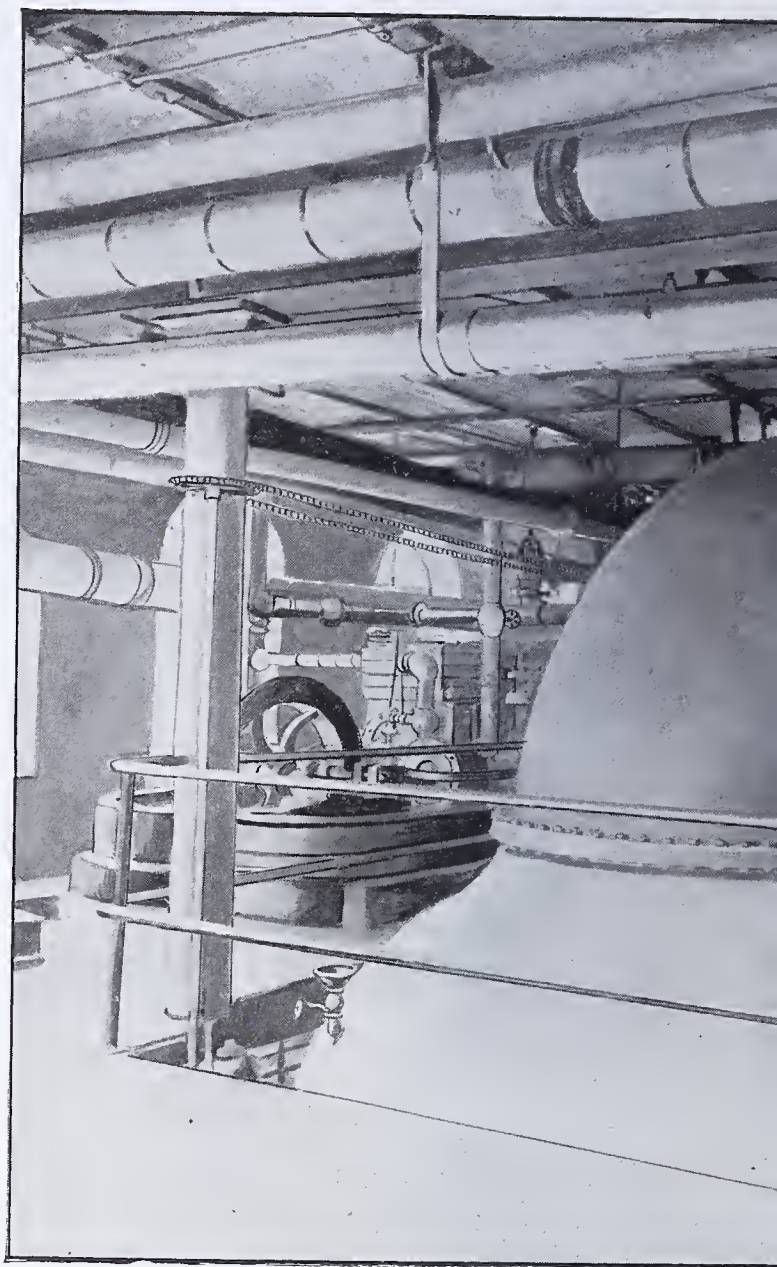


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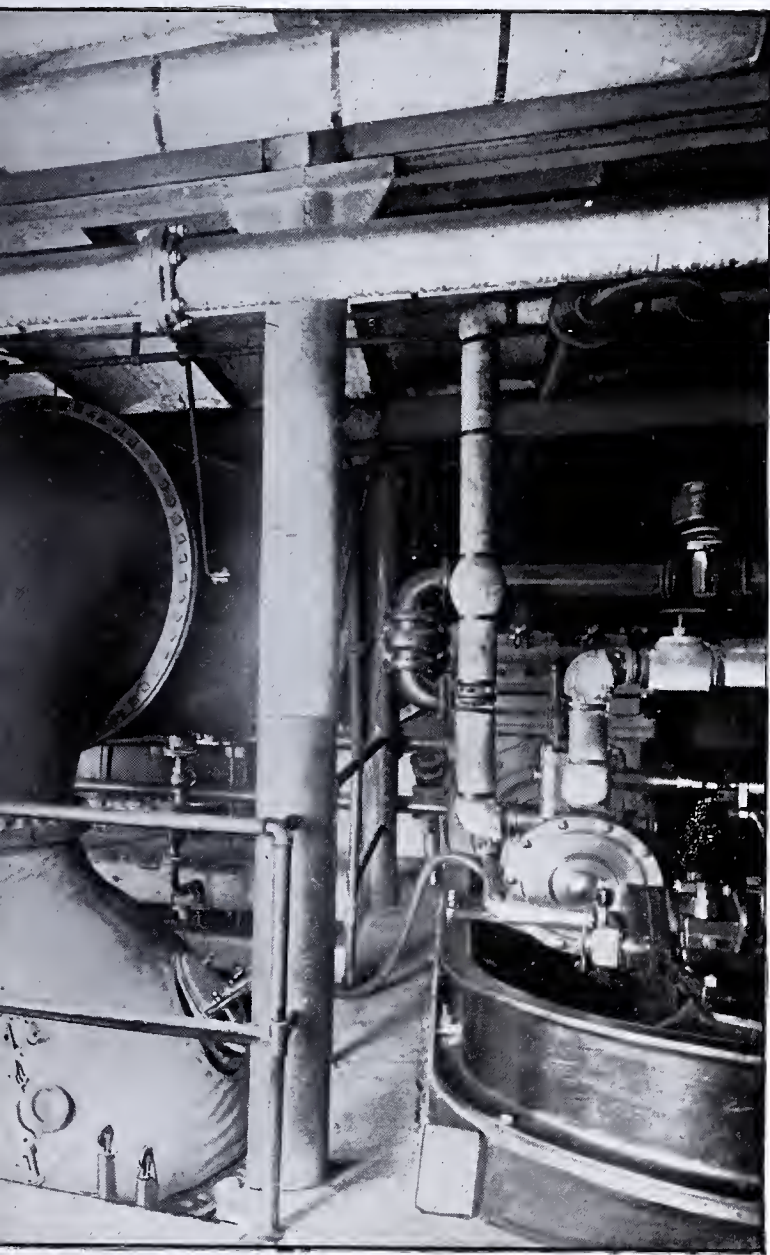
M PANS.





UPPER PART OF VACUUM PAN SHOWN





NG VACUUM PUMP ON THE RIGHT.



having a combined capacity of about 30,000 gallons. The fifth, fourth and third floors are occupied by bone-black filters. (There are twenty-two of them smaller in diameter than those in the C house but are of like capacity, about 1,200 tons altogether.) The bone-black used in these filters is not burnt in the same building, there being no kilns, but instead there is a conveyor located on the second floor, which carries it up and deposits it in a large bin in the next building north of the old filter house, where it is distributed over the kilns placed there. This building is known as the "Retort House" and will be described later. The second floor is known as the "Wagon Floor," and contains an elaborate system of overhead tracks by the use of which the black is wheeled by hand from any of the filters, and carried to the elevator. This is accomplished very expeditiously, as the wagons are light and easily handled. The cellar and first floor are occupied with water filters, heaters and pumps. The water filters are of prime importance, and their efficiency and economical working has been and still is a matter of careful study. They are ten feet in diameter and nearly fifteen feet high, and have a combined capacity of about three million gallons in twenty-four hours. An addition of twenty-five per cent. to the filtering capacity of the works has recently been added, which is located on the eighth floor of the filter house extension.

The water heaters, are special apparatus which heat a portion of the filtered water, the heat being obtained from a source, usually allowed to be wasted. There are two large duplex pumping engines in one end of the cellar of this building with a combined capacity of four and a half million gallons in twenty-four hours. The water for these pumps, as well as that for the three mentioned in the new pan house cellar, is drawn from a main forty-eight inches in diameter. In addition to this there is a twenty-inch main which is kept as a reserve, but often used in conjunction with the forty-eight-inch. If anything else were needed to illustrate the wonderful growth of the works, it would be found in the necessity for enlarging the water supply pipe from twenty inches which was the original size, to forty-eight inches, an increase of nearly six times the volume, and retaining the twenty-inch as well. The size of mains and pumping capacity of the works would suffice to supply a good size town with water.

The last of the four buildings in this block is called the "retort house." It is a fire-proof structure of seven floors, with an area of three thousand five hundred square feet. Its columns are as strong as those in the C house, and was designed to carry additional weight in the future. It is a filter and kiln house, and has a brick chimney to carry off the gases from the flues of the kilns. The bone-black from the filters is distributed over the kilns automatically by means of conveyors, dispensing with the use of wagons, and they are conveyors by which the black can be carried across Swanson street into the C house if required. There is

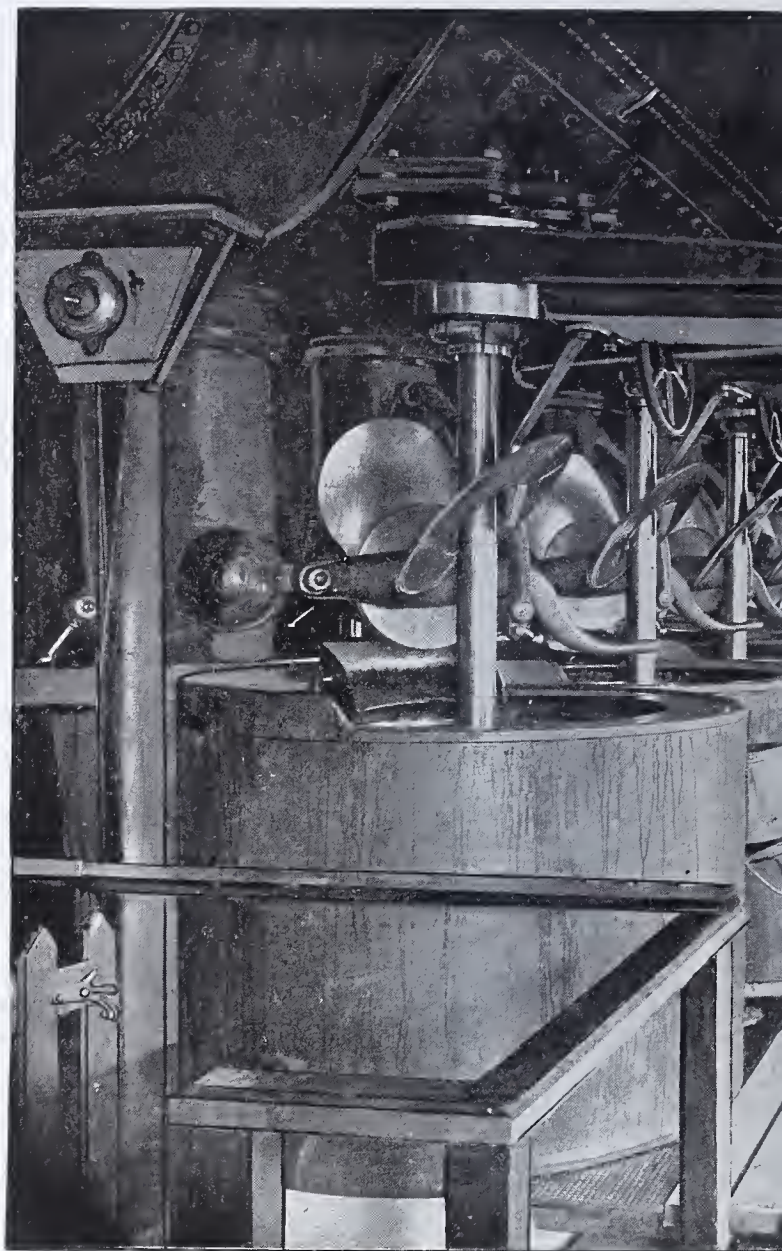
a covered bridge for the purpose, which also serves as a throughfare between the two blocks of buildings.

Opposite the retort house, stands the "Filter House No. 5." This is a recent building, and embodies the best features of the others. It is of the same character as the retort house, being a filter and kiln house exclusively. It has an area of five thousand square feet, and is an eight story brick and iron building. The gases from the kilns are conveyed to an iron chimney eight feet in diameter. It rests upon the fourth floor and is high from that one hundred and twenty feet, or one hundred and seventy feet from the cellar. It is lined with fire brick throughout. Fire brick is also used in all the kilns and flues. The machinery for elevating and conveying the coal is of the same kind as that employed in the boiler house in the C. H. block. The coal is dumped from the carts through a grating in the street, and falling into an elevator boot is carried up and deposited into a large cast and wrought iron bin, from which it runs into a conveyor. Under this conveyor at suitable intervals is suspended shoots which allow the coal to fall through and be deposited on the firing floor ready for use in the kilns. All the machinery in this building is driven by one engine, and the shafting is vertical a change from the arrangement in the other buildings. In all the filter houses, there is an elaborate system of liquor and water pipes suspended over the filters, having valves at convenient heights, so that they can be readily reached by the attendants. There is a covered bridge connecting this building with the retort house, also two other bridges for carrying pipes. These have a latticed iron floor, and are also used for walking across. Under the street is built a tunnel. There are altogether five tunnels connecting buildings across the streets, and in addition to these the whole of Penn street for a block. The construction is strong enough to carry a double railroad track, upon which freight cars are placed for loading with barrels of sugar. The vault is used for the storage of coal, and has a capacity of about one thousand tons.

The next building to be described is a large one called the "Almond street stores." It has an area of about eighteen thousand square feet, and is three stories high. The greater part of it is a United States bonded warehouse, and is the principal depot for the storage of raw sugar, its frontage bringing it within easy reach of the pier and railroad tracks. The machinery in the building consists of a melter to the one in the C house. The liquor produced in this melter is pumped through pipes which are carried in a tunnel under Almond street, and terminating in special tanks on the eleventh floor of the C house. The distance traversed by this liquor is about four hundred feet, and two powerful plunger pumps are used. A part of this building is occupied with a row of six centrifugal machines supplied with sugar from a cooler tank above, the tank receiving the material from an elevator which is fed in the cellar. There are also syrup tanks in connection with these ma-







CENTRIFUG



MACHINES.





chines. A part of the cellar is taken up with steam boxes, of which there are also some in the C house yard. They are cast iron boxes having steam tight doors, and their function is a very necessary one from an economical standpoint. When the hogsheads and bags are emptied, a great deal of sugar clings to the sides, which cannot be removed by scraping. They are placed in the steam boxes, and the steam turned on which washes all the sugar out, converting it into sweet water, which is pumped up to the receptacles used for storing it.

After leaving this building a short walk brings us to the "warehouse" block which is the last to be described. It is bounded by Bainbridge street and Almond street, north and south, and by Penn and Front streets, east and west. It contains three separate buildings, the "warehouse" proper, with boiler house No. 1 in the cellar: "warehouse extension" and office buildings. The entire block covers an area of about seventeen thousand square feet or one hundred and thirty feet square. The boiler house contains nine batteries of safety tube boilers with a combined horse power of three thousand three hundred. This added to the power developed in the boiler house No. 2 gives a working capacity of about five thousand five hundred horse power. To supply all the boilers about two hundred and sixty tons of coal are consumed every day, and when the quantity used in all the kilns (equal to sixty tons more) is also considered an idea may be had of the immense capacity of the refinery. The steam from these boilers besides being used for heating and boiling, furnishes power to about thirty engines and ninety pumps of different sizes. Besides these there are six steam passenger and freight elevators used in all the buildings, which take their supply from the boilers. The boilers are supplied with artificial draught, the air being collected by a blower and conveyed through large sheet iron pipes terminating in outlets of diminished sizes leading to each furnace.

The floor immediately above the boiler house is constructed of heavy iron beams and girders, which rest upon cast iron columns. Between the beams there are sprung double arches of brick, which separate the boiler-house from the warehouse above. This warehouse is a wooden building of six floors, and contains principally the machinery for packing the sugar. Mention has already been made of the conveyor belts that carry the sugar from the pan houses. They travel along heavily freighted with a thick layer of sugar, and from their celerity seem as though anxious to escape the burden imposed upon them. They cannot do it, however, for the sugar is heaped upon them as fast as they can deposit it. It is then taken up by elevators in the warehouse to the sixth floor, and received into a bin which is provided with machinery for cooling it and breaking up the lumps. After passing through a second process of disintegration, it is spouted into the packers. These machines are nearly automatic, all that the men do is to take the full barrels away and put the empty ones under the machine to be filled again. The packer

starts and stops itself, and packs the barrel in about one-fourth of a minute. There are four of these machines, and they work without any intermission.

This process applies to the brands of soft sugar. The sugar to be granulated after being conveyed to the sixth floor is received into a bin whence it is spouted into granulating machines. These consist of long cylinders closed at one end and revolving horizontally, and containing throughout their entire length situated centrally a much smaller, closed cylinder to which steam has access. On the inner surface of the outer drum, strips of sheet metal, a few inches wide, are fastened in such a manner that sugar placed in the lowest portion of the drum is carried along with it for a semi revolution and then dropped on the heated inner cylinder. The process is continuous and the sugar is lifted and allowed to drop on the warm surface many times during its passage through the granulator. The frequent falls to which the sugar is subjected break up any lumps that may have formed, prevents the crystals from adhering together as they dry. The moisture thrown off is immediately removed by a fan kept in constant operation. The sugar would then be ready for barrelling were it not that uniformity of grain was desired. To accomplish this it is screened in bolting machines similar to those used for flour, and when run into barrels is a beautiful fine material with sparkling crystals. The packers used for this kind of sugar consist of rocking plates agitated by machinery upon which the barrels rest. The powdered sugars are manufactured from the particles of granulated that are too large to pass through the screens. They are ground in suitable mills revolving with terrific velocity, and after being bolted find their way as impalpable sugar into the barrels without any mechanical packing.

The cube sugars are manufactured in this building. The machinery for this consists mainly of a revolving drum or die, into which the sugar is fed. The sugar previously moistened with thick syrup is compressed into spaces, each the size and shape of the finished cube, extending from the surface toward the center of a drum rotating horizontally. The revolution of the drum is continuous, and the cubes are expelled while the drum is in motion by plungers thrown forward by a cam. The cubes drop row by row at a time in rapid succession on metal plates carried forward under the drum by an endless belt. The sugar is removed from the belt and placed in drying closets where the cubes harden in the course of a few hours. It is almost impossible to do justice to this admirable machine in a simple written description but it may be unhesitatingly stated that of the many remarkable inventions in use in the refinery there is not one which exceeds in ingenuity that just described. When dry they are screened and packed, the barrels being agitated by packers similar to those used for granulated sugar.

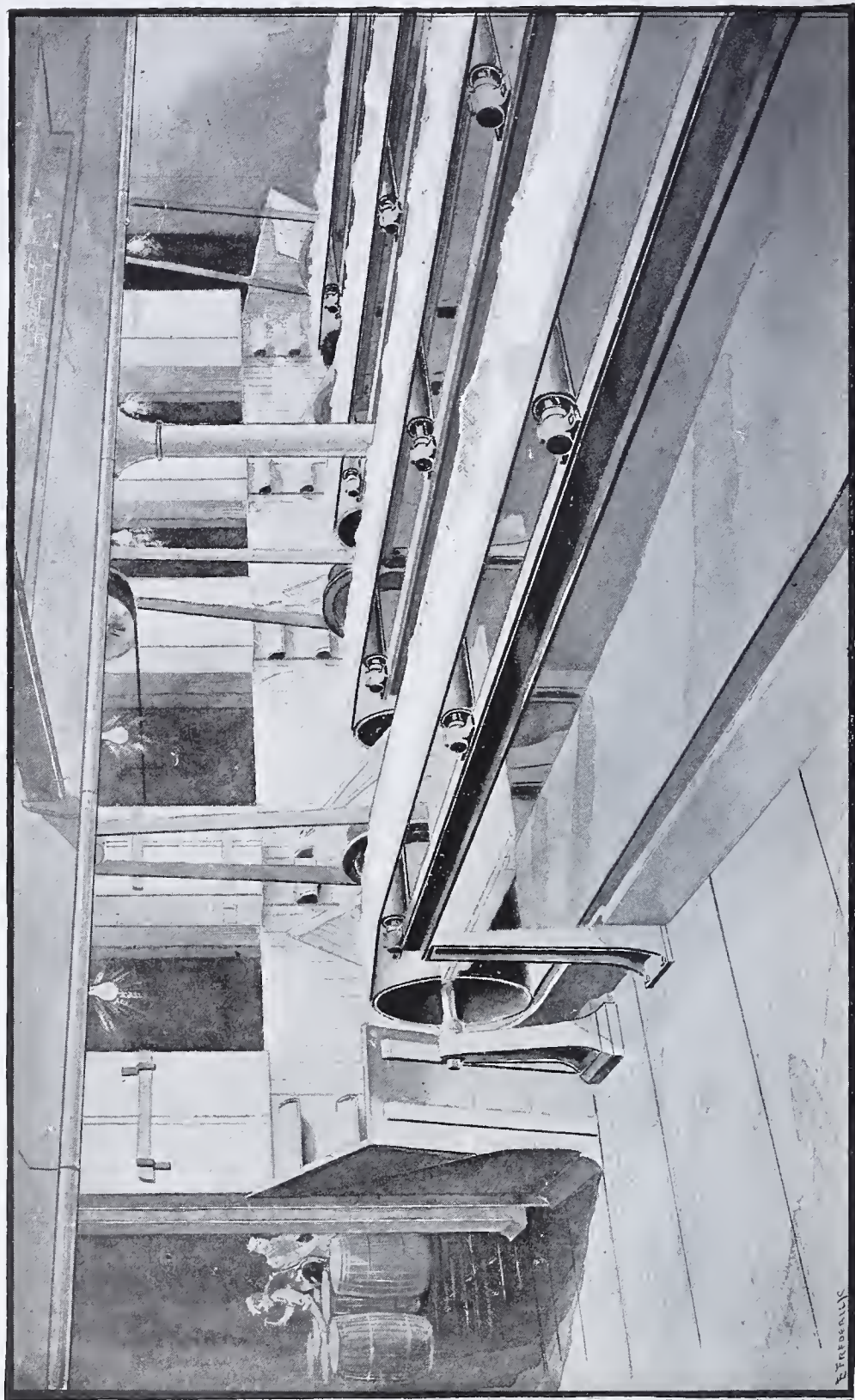
The packing floor of this building being higher than the delivery plat-







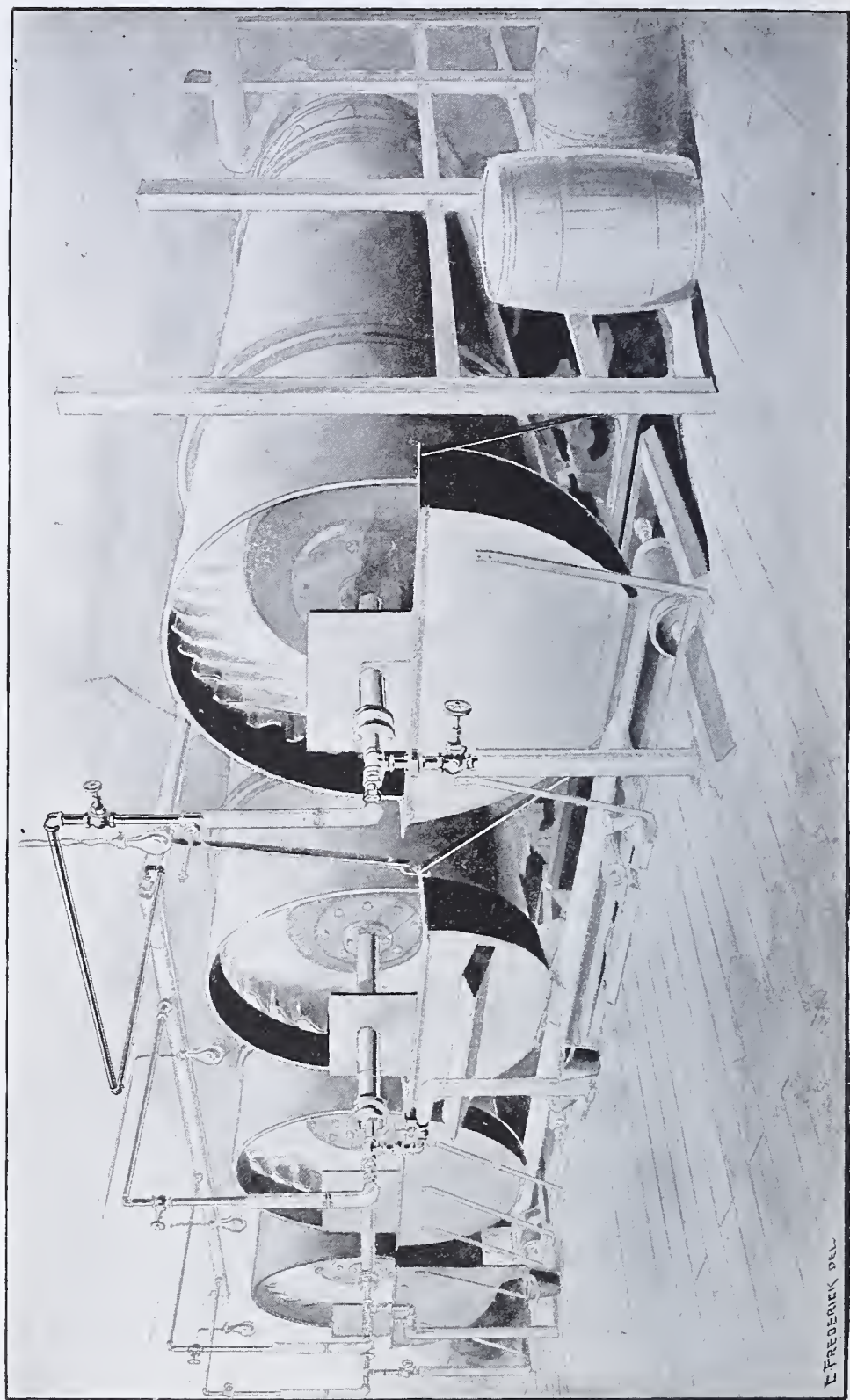




FRANCOIS

CONVEYORS FOR REFINED SUGAR

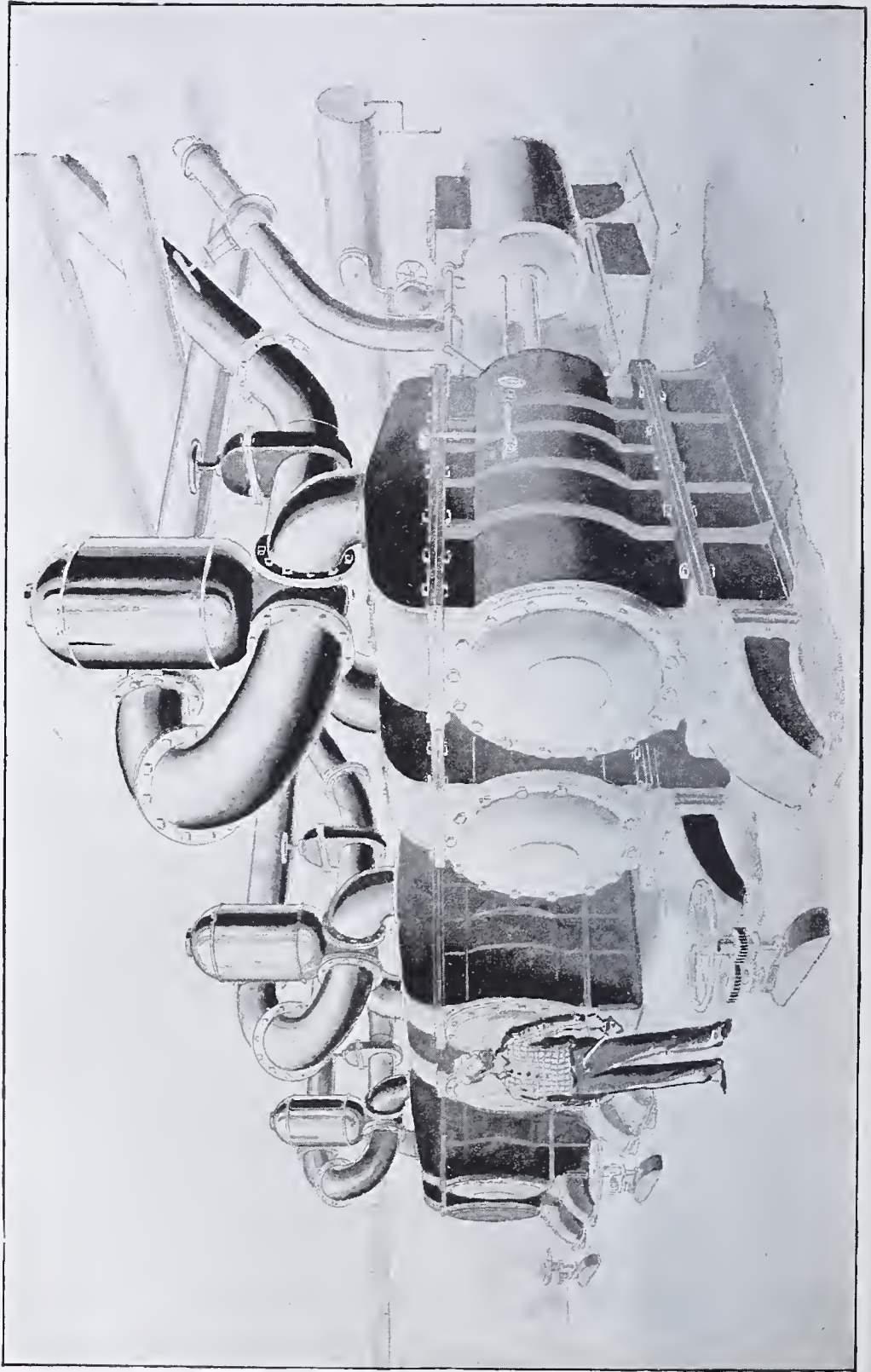




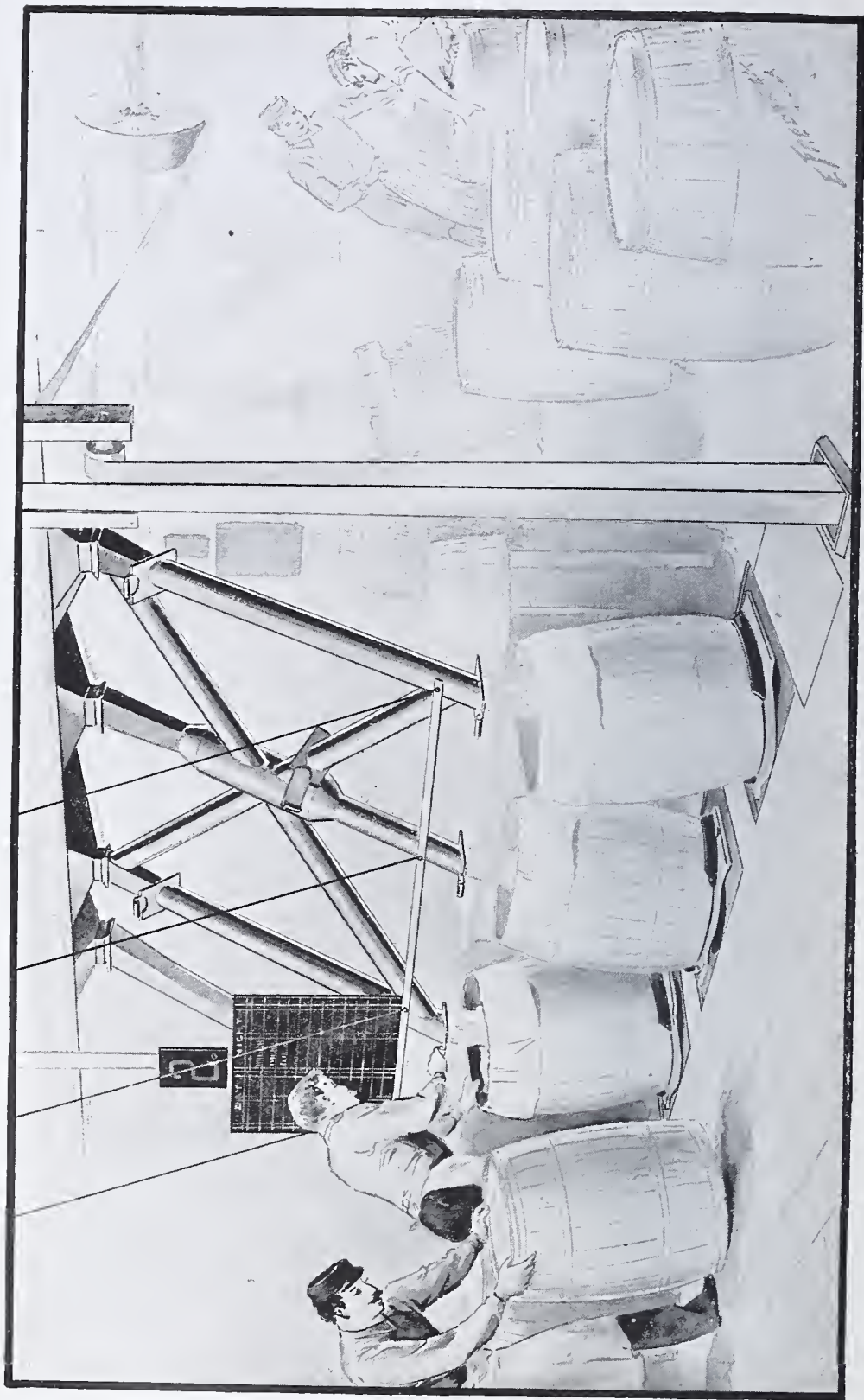
DRUMS FOR DRYING GRANULATED SUGAR











PACKERS FOR REFINED SUGAR



form, a number of gravity lowerers or "dummies" as they are called, are used to lower the barrels. The platforms are double, and the descending barrel causes the empty platform to rise ready to be loaded. The apparatus is controlled by suitable brakes, and any one standing on Penn street, when the cars are being loaded, would be surprised how quickly these dummies are manipulated. They have to be, for the locomotive is hissing impatiently to be away with its train of cars, so that it can bring the empty ones back to be filled in turn. The floors of the warehouse not occupied with machinery, are used for the storage of full barrels when necessary. There is a belt elevator for the purpose placed in the center of the building which can take up or deposit barrels on any floor without stopping. The empty barrels are taken into the building by means of a short elevator specially constructed for the purpose. They are brought in wagons holding about 100 each, and loaded on an inclined platform, which rolls the barrels into the elevators. The wagons deliver the barrels on Almond street, and the hauling goes on all day without intermission. This constant stream of empty barrels, as well as the nailing up of full ones, necessitates the employment of a vast army of coopers, as the heads are knocked out of the empty barrels as soon as received, and the nailing up is very carefully done before the barrels leave the establishment. The "Warehouse Extension" is a recent addition to the storage room of the works. It is located west of the warehouse and communicates with it on all floors. It has a frontage on Front street of about 90 feet, and is a six story composite building, having iron columns and beams with planked floors. It has an area of about 4,000 square feet. There is no machinery in this building except an empty and full barrel elevator, of similar design to those in the companion building. Both these buildings are provided with automatic sprinklers, and in addition have stand pipes with hose connections at each floor to be used in case of fire. There is a fire brigade composed of employes of the firm, who are frequently called out for practice.

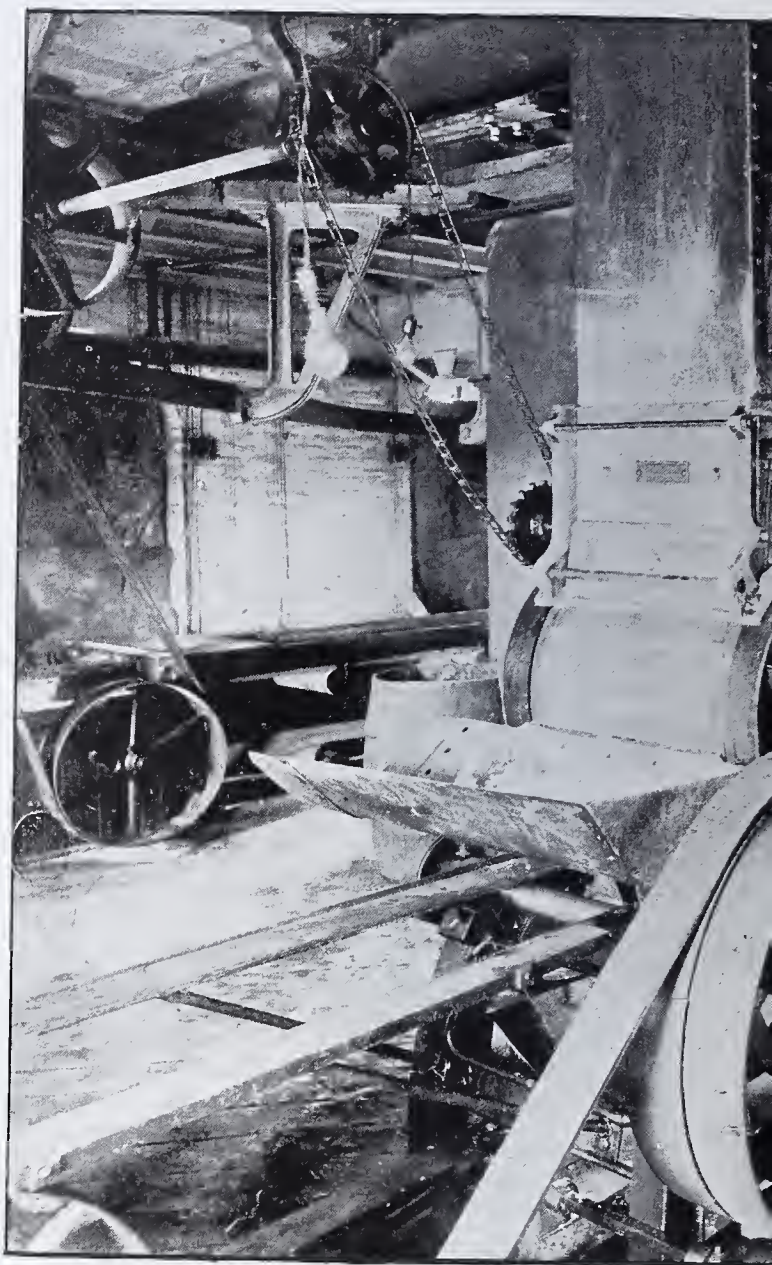
In the basement of the extension is located the electric-light plant. This consists of four engines of one hundred horse power each, which furnish the power to nine dynamos, having a combined capacity of 3,600 lamps. The engines are coupled forming two sets of two engines each. By this arrangement two counter shafts are used, making a duplicate plant, so that in case of accident to one set of engines, the others can be used on the same wiring. This plant furnishes the light for all the buildings as well as the office.

The last building to be described is a wing of the extension, and contains six floors. The first floor is the business office for the clerks with a private room for the general manager. On this floor is also located the pay office, the second floor contains the laboratory, with pri-

vate study for the chemist. The third floor is occupied with an office for the members of the firm, and a room in the rear for the sugar samplers' use. On the fourth floor is located the drawing room, with an office for the chief engineer. The drawing room has accommodations for twelve draughtsmen, and an organized force is kept constantly employed. There is a blue printing apparatus in connection with the drawing room. All plans for new building, and machinery are prepared under the direct supervision of the firm, no outside architects being employed, and the internal improvements which are always being made, afford continued occupation to the force in the drawing room. There are over one hundred drawers containing about six thousand drawings and tracings. The drawings increase at the rate of about four hundred and fifty every year, and in addition to these there are nearly two thousand hektograph sketches of minor details of machinery. All the offices are provided with lavatories and dressing rooms. The fifth floor of the office building is fitted up as a pattern room, and in the sixth is located a room devoted to experimental purposes. The pattern room on the fifth floor contains about fifteen hundred patterns of parts of machines and from one to three patternmakers are regularly employed. The patternmakers have benches in the carpenters' shop which is located on a floor under the first floor of warehouse extension. This shop contains a complete set of wood-working machinery, and the requirements of the refinery give employment to a regular force of about twenty carpenters. There are more than twelve million bricks used in all the buildings, and over thirty miles of pipes.

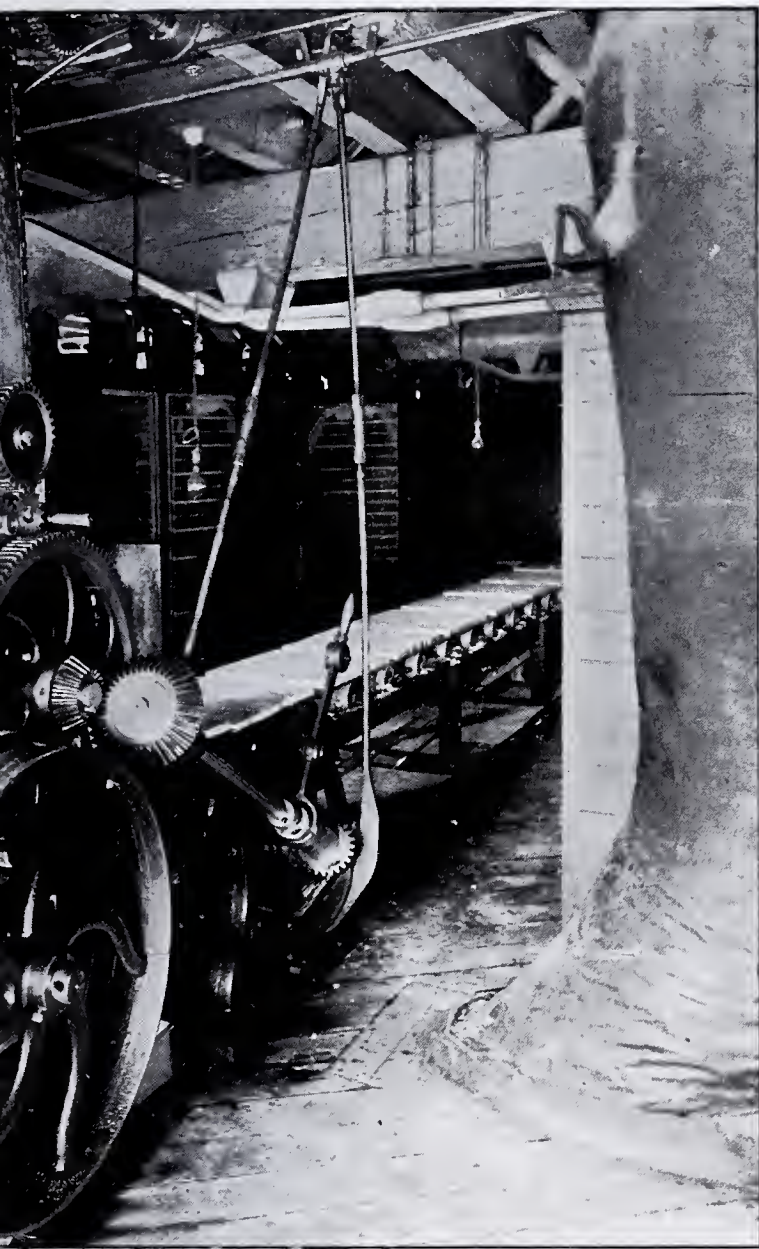
The names of the corporations, at present conducting the sugar refining business in Philadelphia, are The Franklin Sugar Refining Company, The Spreckles Sugar Refining Company, The E. C. Knight Sugar Refining Company and The Delaware Sugar Refining Company. The limit of capacity of each of these houses is supposed to be, as nearly as can be ascertained, as follows; The Franklin Sugar Refining Company, 7,000 barrels per day; The Spreckles Sugar Refining Company, 5,000 barrels per day; The E. C. Knight Sugar Refining Company, 1,500 barrels per day and The Delaware Sugar Refining Company, 600 barrels per day.



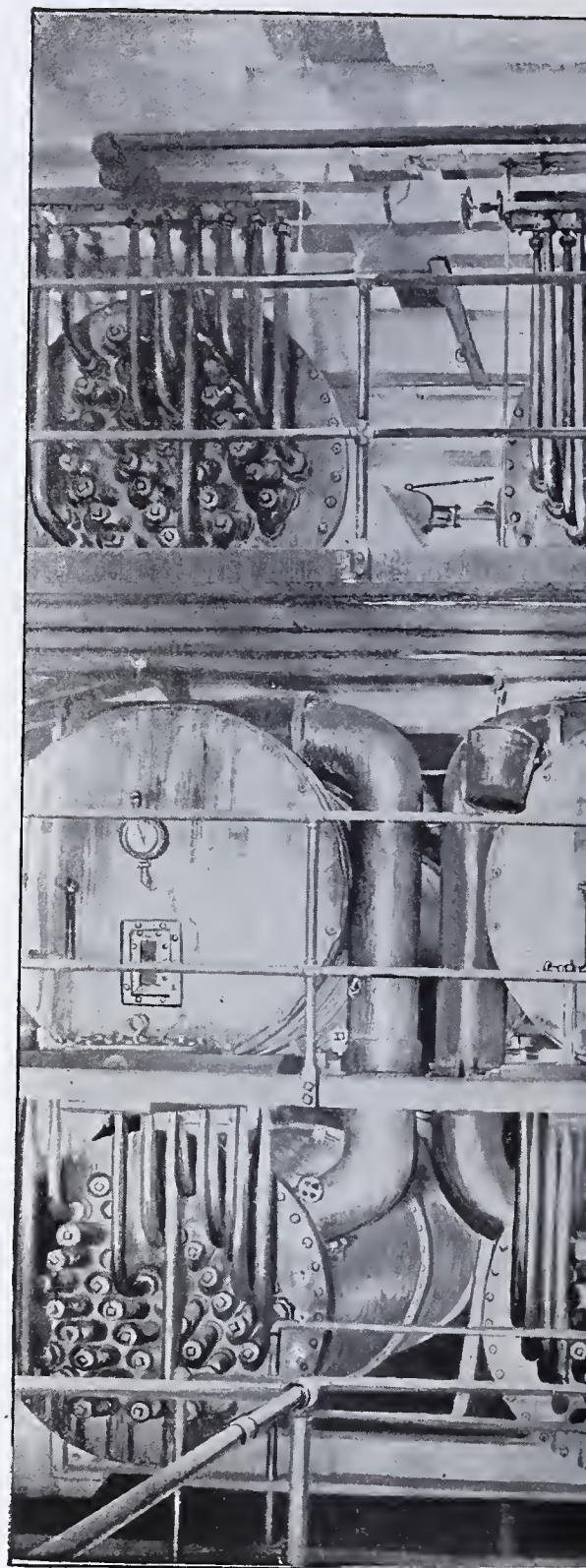


MACHINE FOR M





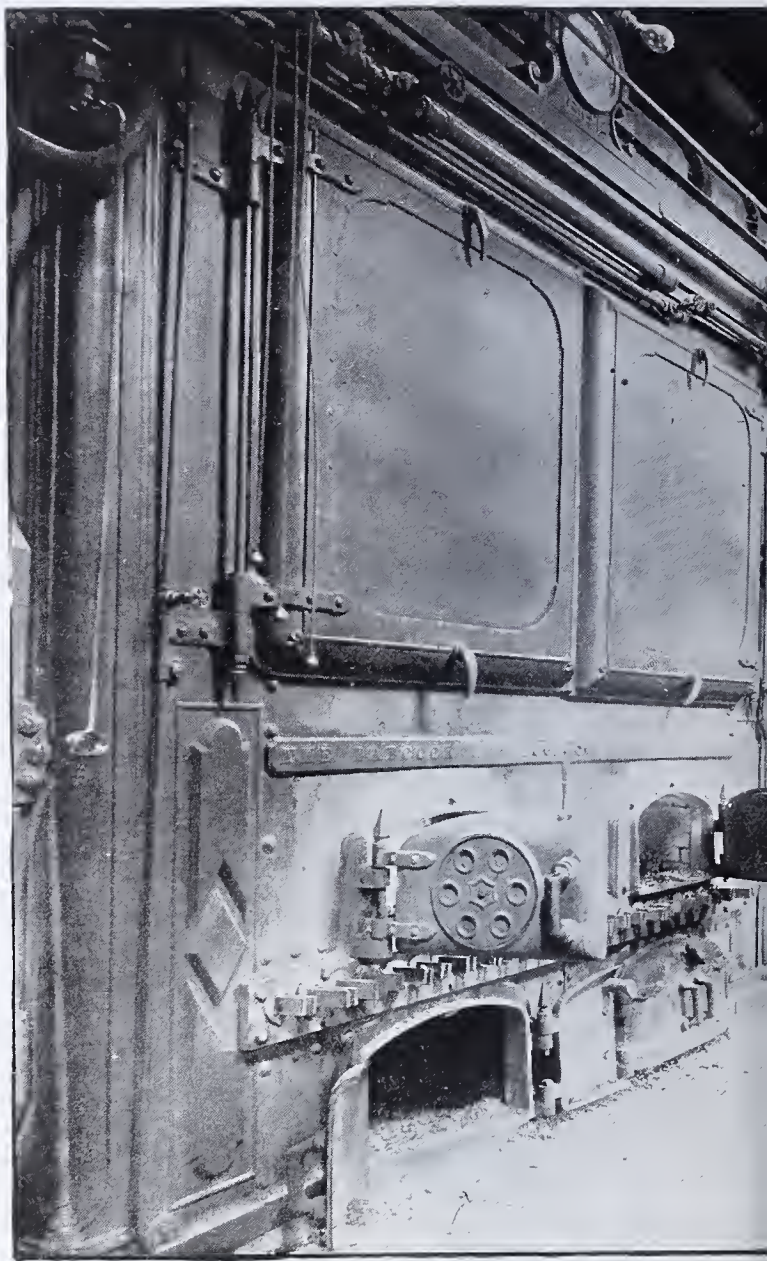
ING CUBE SUGAR.





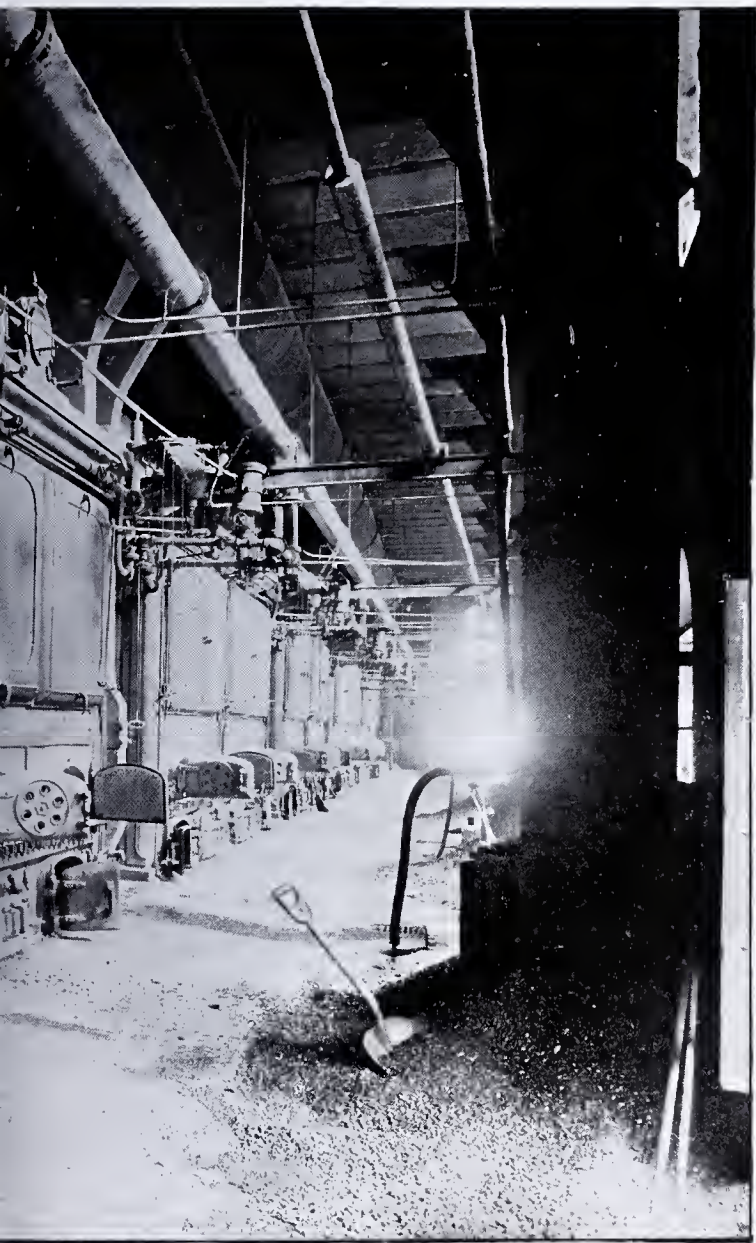
PORATOR.





BOILER





HOUSE.



THE CO.



'S PIERS.





## RAILROAD RELIEF ASSOCIATION.

In the report of this Bureau for 1887, a description was given of the various relief associations in the state, supported in part or wholly by companies or persons for the benefit of their employés. Besides these, workingmen often have associations supported and conducted wholly by themselves. They may be divided into two kinds. First, those which are organized and conducted for the sole purpose of extending benefits to their members, and are known as purely friendly societies; and, second, those which are organized for conducting wage negotiations as well as the granting of relief to their members. One of the best known associations of the latter kind is the ordinary trade union. Perhaps the more important object of this organization is to establish and maintain the rates of wages of their members and similar matters, but, besides doing these things, it also has a benefit feature, and which is regarded by the members as very important. Purely benefit societies are perhaps not numerous in this country, though they have been long known in Great Britain and on the continent of Europe. Of late, however, a large number of such organizations have been started in this state. They are organized in many ways, but the chief object of all among workmen is essentially the same, to grant an allowance to a person who is disabled by accident or disease during the period of disability, and in the event of death to secure something for his family. In return for such benefits a contribution of some kind is made by him when in health and able to work.

Besides the associations mentioned some of the railroad companies, within a few years, have also formed beneficial associations for their employés. The Baltimore and Ohio Railroad Company lead in this movement ten years ago (May, 1880). The Pennsylvania Railroad Company followed in 1886, and the lines west of Pittsburgh belonging to the company, in 1889. The Lehigh Valley Railroad Company formed such an association in 1888, the Philadelphia and Reading Railroad Company the same year, and the Cumberland Valley Railroad Company in 1889. Thus all the more important railroad companies in the state have such associations while the Philadelphia and Reading also has one for the miners employed by the Philadelphia and Reading Coal and Iron Company.

These associations have existed many years in England and France.

The London and Northwestern Insurance Society and Superannuation Saving Bank, the Friendly or Providence Society and Mutual Guarantee Fund, the Great Northern Railway Beneficial Institution, the Great Western Railway Superannuation Society, are English associations of this character existing among railway employés. Perhaps the most noteworthy association of the kind in France is connected with the Central railway. The object of all of these societies is not only to relieve members when incapacitated for work, or when overtaken by old age or death, but also to promote habits of thrift and industry. Many of them go even further, and provide for the moral and mental training and entertainment of their members, and in other ways exercise an intelligent care and supervision over their interests.

One objection that has been urged against the participation of an employer in such an association is, that the employed ought to take care of themselves, and that the employer has no duty to perform in this regard. It is true that no contract-duty of this nature exists. The employer does not agree in the event of the sickness of his employé to furnish any additional contribution, or to bury him if he should die, or to maintain his family afterwards. If he fulfils his promise with respect to the amount and time of the payment of his wage his duty is done.

Another objection to associations which are sustained by the contributions of the employed and employers is, they have a tendency to make employés less independent. Perhaps there is some truth in this objection. In considering it in a former Report we inquired, is it true that the assistance of employers in times of distress will lead to a spirit of dependence and servility on the part of the workingmen? If this should be the outcome, certainly it would be deplorable. But this much is certain, that for two hundred years or more, employers of labor have sanctioned such assistance. This is the starting point in considering the subject. It has been freely given during all this long space of time. The experience of thousands of employers is on the side of rendering needful assistance. The voice of the whole world, with here and there an exception, approves. But a very sharp limit should be drawn in rendering it. If the granting of assistance should lead men to become dependent; should lead them to feign sickness when they were able to work; should engender habits of laziness and improvidence; should lead them to forget the future and neglect to provide therefor, then the sooner it is cut off the better. But it is hardly possible that such assistance has ever been carried to this point. The employer has never supposed that he was giving so much as to lead men to become indolent, or to think that if they did not work on proper occasions, or lay by their earnings during seasons of unusual prosperity, they would fall back on him for assistance. This opinion or feeling, we say, has been rarely entertained by an employer. We think it

would be very difficult, indeed, to find evidence of cases in which the workingman refused to work, or shrank from it under one excuse or another, expecting to get a living from his employer. It is true that the tramp, on more than one occasion, has committed a theft in order that he might be prosecuted and sent to jail, and thus get a gloomy cell for a home. It is also true that among the friendly labor societies in Great Britain the assistance sometimes rendered has led men to feign sickness or to be indolent, and prey on their fellow-companions for a living. Such things have happened. Perhaps we ought to add here, however, that in all well-managed friendly societies the kind of assistance is credited, books are kept of the amount, and dates furnished and the causes therefor. Moreover, regularly-appointed visitors look after sick members and make reports and recommendations, and, therefore, whatever may be said about excessive assistance in the past on the part of these associations, it may be truly said among the best of them their assistance is very intelligently administered. But, turning now to the assistance rendered by the employer, we think the cases are extremely rare in which the expected assistance has been the cause for the shirking of duty on the part of the employé. We repeat, however, that assistance in no case should be carried to such a point, but below this the experience of the world has certainly justified and approved the rendering of it.

One reason for forming such associations is, that relief administered systematically will go much further than when administered otherwise. It is unquestionably true that by uniting men in a single organization, with competent officers, the money or other assistance contributed for the relief of their members will be expended with greater intelligence and economy than when expended in less systematic ways.\* Who questions for a moment that by establishing hospitals and similar institutions, the patients in most cases receive better care and attention than they would in other places, while the expense is also much less. The judgment of the world is quite unanimous in these matters. There is no question, then, that the money thus contributed will bring more relief than it would if contributed in a less regular way.

Another reason for organizing these associations is, that the workingmen will save far more than they would otherwise. It is often said of the working class that they are thoughtless about their savings. Let us, however, not forget to mention that the same thing is true of people in general, and that those who are really prudent and try to save something for old age and sickness are by far the smaller number in every community. Workingmen, doubtless, are no worse than others in this regard, yet the fact is true that a large portion of them are of this type, while another fact is equally true, that they ought to save something for sickness, old age and for their families. Of course, they do not deny this, but they are unwilling to deprive themselves for the sake of



saving something for the future. This is the common history of mankind, a future higher happiness is sacrificed for a present lower one. There are happily always some in every community who think of the future, and who are desirous of providing for it. When men see some of those around them thus provide for an evil day, they too are encouraged to follow their example. This is particularly the case when a society holds out strong inducements to enter it. This fact that men ought to save when they can, instead of spending all their earnings, has led one of the railway relief associations, that is connected with the Baltimore and Ohio railroad, to require their men to save a portion of their earnings. This, at first, seemed to be a somewhat harsh requirement: workingmen, in this country especially, believe in maintaining their independence, and every movement looking like coercion on the part of their employers is regarded with aversion. Nevertheless, it rests on very strong reasons. In the first place can this feature be called compulsory even as executed by the Baltimore and Ohio Railroad Company? The company simply requires, as a condition of employment, that men should join this organization. A man applies for work, the company is willing to employ him on condition that he will do various things, one of which is that he shall join this association. If for any reason he does not wish to become a member he need not enter into an agreement to work for the company. His freedom, therefore, is not in the least impaired, he can work or not as he pleases. How can a system be regarded as compulsory which is administered on such a principle?

Again, whenever such associations do not exist, workingmen, in times of distress, or their nearest friends, ask for contributions from their fellow employes and those who employ them. This has been the common practice everywhere. Usually, the response is generous, and it reveals the good side of human nature; but it should also be remembered that this is really a tax which the more industrious and thrifty pay to support the less prudent of their number. They expect to be thus assisted when the evil day comes, and it may be that in expectation of receiving such assistance they care less for the future. But usually they are the ones who are the most strongly opposed to the formation of such associations. Does not the spirit of unfairness exist at the bottom of such opposition, to desire all of one's earnings for present expenditure with the expectation of getting a portion of the savings of others during sickness? Yet those who do not save often receive the same wages and, if having more prudent habits, would be just as well able to save as the most thrifty among them. Is it, then, quite the fair thing to remain outside these associations and expect that when adversity comes the more prudent will take care of the improvident? If they do not reason in this way their whole conduct implies such a course. They generally are quick enough to seek for relief when overtaken by adversity. One would think that living on the same plane



with their fellows, and having the same opportunities to save, etc., they would be very slow indeed to ask for contributions in the day of misfortune, but we all know that is the fact. Ought they not, in justice to the thrifty, who generally are very willing to enter such associations, to form like habits of prudence and economy. And if they will not, ought not every proper argument to be urged and every method be adopted that will lead them to take this step? Are not, then, the Baltimore and Ohio Railroad Company justified by the strongest moral reasons for requiring membership as a condition of employment? The company assumes, and rightly too, that if a portion of its employ  s do not enter the association and they become incapacitated, that the officers and men must and will, in part at least, support those incapacitated during their period of disability. This certainly has been the case in the past and would continue to be if no such association existed.

The Pennsylvania Railroad Company does not require that an employ   should join the relief association as a condition of employment. Thus the two associations rest on a somewhat different basis. In the case of the Baltimore and Ohio all of the employ  s of the railroad company are members of the relief association, and, therefore, the question of membership is solved. In the case of the other the membership has continued to increase until it marked a total of 24,984 members or about 40 per cent. of the number of employ  s upon December 31st, 1890. This shows clearly that the association is becoming more and more popular; and doubtless the time will soon come when by far the larger portion of the employ  s in all the various companies which form this system of railways will be members.

Some of the leading features of these associations will now be given, beginning with the relief department of the Pennsylvania Railroad Company. The sources of income are derived from the employ  s, from investments, appropriations by the company and other gifts. The contributions of the employ  s are made monthly, and by the terms of membership are deducted from their wages, so that no inconvenience is experienced in collecting the contributions. From the fund thus collected the members are entitled to receive definite amounts in proportion to their contributions when disabled by accident or sickness, and in the event of their death definite amounts are payable to their relatives or designated beneficiaries. The employ  s are divided into five classes determined by their earnings per month.

1st class—Earnings per month not more than . . . . .	\$40 00
2d class—More than \$40.00 and not more than . . . . .	60 00
3d class—More than \$60.00 and not more than . . . . .	80 00
4th class—More than \$80.00 and not more than . . . . .	100 00
5th class more than \$100.00.	

The members of the several classes contribute monthly as follows:

1st class, . . . . .	\$0 75 per month
2d class, . . . . .	1 50 per month
3d class, . . . . .	2 25 per month
4th class, . . . . .	3 00 per month
5th class, . . . . .	3 75 per month

We may next inquire into the benefits to which the members are entitled.

1st. Payments for each day while disabled by accident in the company's service.

For 52 weeks.	After 52 weeks, and until recovery
1st class, . . . . .	\$0 50 . . . . . \$0 25
2d class, . . . . .	1 00 . . . . . 0 50
3d class, . . . . .	1 50 . . . . . 0 75
4th class, . . . . .	2 00 . . . . . 1 00
5th class, . . . . .	2 50 . . . . . 1 25

2d. Surgical attendance during disability from accident in the company's service.

3d. Payments while disabled by sickness or by injury other than accident in the company's service, for each day after the three first days.

	For 52 weeks.
1st class, . . . . .	\$0 40
2d class, . . . . .	0 80
3d class, . . . . .	1 20
4th class, . . . . .	1 60
5th class, . . . . .	2 00

4th. Payments in the event of death.

1st class, . . . . .	\$250 00
2d class, . . . . .	500 00
3d class, . . . . .	750 00
4th class, . . . . .	1,000 00
5th class, . . . . .	1,250 00

In addition to the death benefits here mentioned an additional death benefit may be taken on application and passing a satisfactory medical examination. By so doing the member can procure a larger death benefit for his family. The following table shows the entire benefit which it is possible for a member in any class to create for his family or other beneficiaries :

	Death benefit of class.	Additional death benefit.	Total death benefit.
1st class, . . . . .	\$250 00	\$250 00	\$500 00
2d class, . . . . .	500 00	500 00	1,000 00
3d class, . . . . .	750 00	750 00	1,500 00
4th class, . . . . .	1,000 00	1,000 00	2,000 00
5th class, . . . . .	1,250 00	1,250 00	2,500 00

For which additional death benefit of the first class the rates are as follows :

For a member not over 45 years of age, 30 cents per month.

For a member over 45 years of age and not over 60 years, 45 cents per month.

For a member over 60, 60 cents per month.

These rates apply to each single death benefit of \$250.

Such are some of the prominent features of this organization. It may be inquired, what does the company do towards sustaining this association? It manages the business of the department; guarantees the fulfilment of the obligations assumed by it, becomes responsible for its funds, pays all the operating expenses, including the salaries of the officials, medical examiners and clerical force, pays interest on the monthly balance in its hands, and approves the securities in which investments may be made. It should be added that if in any period of three years there is a deficiency this is made up by the company, but if there is a surplus beyond what is required to meet liabilities therein incurred, it is used in the promotion of a fund for the benefit of superannuated members, or in some other manner for the sole benefit of members.

With respect to the creation of a fund for the benefit of this class the last report of the relief department, issued last December, says: "To the original sum of \$170,788.24" set aside at interest as "a foundation for a fund for superannuated members, combined with a pension fund for the members of the relief fund," there has been added interest upon that sum amounting to \$14,078.44, making a total of \$184,866.68 drawing interest from January 1, 1891. The special committee of the advisory committee appointed by the chairman, as stated in a previous report, to consider and prepare a plan for the establishment and administration of such a fund, has continued to give the subject consideration. The problem is a very difficult one, and a satisfactory conclusion has not yet been reached by which the amount available can be used to secure the desired result. It is hoped, however, that the committee may reach such a conclusion in the near future."

The desirability of having such a fund cannot be set forth in better words than those used by the celebrated Dr. Farr of England in the report of the English Select Committee on Civil Service Superannuation: "In the first place, superannuation is a guarantee of fidelity; in the second place, it encourages efficient officers; in the third place, it retains good men in the service; in the fourth place, it induces men to retire when they become old or inefficient from any cause; and, in the fifth place, it prevents old servants from falling into disgraceful dependence, or distressing destitution, which would be a public scandal, and would deter desirable persons from entering the service."



The following is the record of deaths, disabilities and payments since establishing the association.

YEARS.	Number of deaths from accident.	Number of deaths from natural causes.	Number disabled by accident.	Number disabled by sickness.	Number of payments for disablements.	Amount of payments for disablements.	Average per payment for disablements.
1886. . . . .	32	116	1,744	3,653	5,397	\$53,526 60	\$9 88
1887. . . . .	49	198	3,186	7,186	10,372	130,253 80	12 56
1888. . . . .	53	197	3,849	7,815	11,664	152,692 76	13 09
1889. . . . .	64	219	4,915	10,834	15,749	193,147 81	12 26
1890. . . . .	81	260	6,512	17,673	24,185	275,256 99	11 38

The regulations of the different organizations will now be given, beginning with those of the Pennsylvania railroad, which includes the Northern Central Railway Company, the West Jersey Railroad Company, the Philadelphia, Wilmington and Baltimore Railroad Company, the Camden and Atlantic Railroad Company, and the Baltimore and Potomac Railroad Company.

The following are the regulations in full under which this department is operated :

#### REGULATIONS.

##### *General.*

1. The "Relief Department" is a Department of the Company's service in the executive charge of a Superintendent, whose directions in carrying out its regulations are to be complied with, subject to the control of the General Manager.

2. In these regulations, unless otherwise indicated, the titles "Company," "Board of Directors," and "General Manager," will be understood as meaning the Pennsylvania Railroad Company and the Board of Directors and General Manager of that Company.

3. The object of this Department is the establishment and management of a Fund to be known as "The Relief Fund," for the payment of definite amounts to employes contributing to the Fund, who, under the regulations, shall be entitled thereto, when they are disabled by accident or sickness, and in the event of their death, to the relatives or other beneficiaries specified in the applications of such employes.

4. The Relief Fund, from which the proposed benefits are to be paid, will be formed by voluntary contributions from employes; appropriations, when necessary to make up any deficit, by the Company; and income or profit derived from investments of the moneys of the Fund and such gifts or legacies as may be made to the Company for the use of the Fund.

5. The Company will take general charge of the Department; guarantee the fulfillment of the obligations assumed by it in conformity with the reg-



ulations from time to time established; take charge of the funds and be responsible for their safe-keeping; supply the necessary facilities for conducting the business of the Department, and pay all the operating expenses thereof.

6. There shall be an Advisory Committee constituted, as follows:

The General Manager shall be *ex-officio* a member and chairman of the Committee.

The other members of the Committee shall be chosen annually, in the month of November, to serve for one year from the first day of January next succeeding, and until their successors are chosen, as follows:—

By the contributing employés of the Pennsylvania Railroad Division, from among themselves, one member;

By the contributing employés of the United Railroads of New Jersey Division, from among themselves, one member;

By the contributing employés of the Philadelphia & Erie Railroad Division, from among themselves, one member;

And by the Board of Directors of the Pennsylvania Railroad Company, three members.

The members selected by the contributing employés shall be chosen by ballot, the vote being taken and certified under oath by tellers selected by the Advisory Committee. Each member of the Relief Fund will be entitled to cast one vote.

For the Committee to serve during the first fiscal year, and to fill vacancies occurring thereafter, the members to represent the employés shall be designated by the General Manager. Such members and the members to be chosen by the Board of Directors, for the original committee or to fill vacancies, shall serve until their successors are duly chosen as above provided. The Superintendent of the Relief Department shall be Secretary of the Committee.

Should any other corporation or corporations associated in interest with this Company, adopt or have adopted, regulations establishing Relief Departments similar to the one hereby established, this Company shall have power to associate itself with such corporation or corporations in the administration of the Relief Departments hereby and thereby established, when so authorized by the respective boards of directors of this and said corporation or corporations.

Such association shall be evidenced by agreement or agreements duly executed, authorizing, among other things, the constitution of a Joint Advisory Committee to be chosen, as and in the manner therein prescribed, by the several parties thereto, and their employés, either by separate action in behalf of each of said parties, or by the united action of two or more of them as to any member or members of said committee; the original committee to be constituted and vacancies occurring thereafter to be filled, in such manner as shall be prescribed.

In the event of any association as aforesaid, the functions and powers herein given to and vested in the Advisory Committee created as hereinbefore provided, shall, during the continuance of said agreement or agreements, be transferred to and vested in the Advisory Committee constituted as prescribed in said agreement or agreements, chosen as therein directed, and so much of the Organization and Regulations of the Relief Department herein provided for, as relates to the constitution of an Advisory Committee consisting solely of officers and employés of this Company, shall be suspended, with the understanding, however, that upon the determination of such agreement or agreements, the Advisory Committee herein provided for,

constituted as herein prescribed, shall reassume the functions and duties herein committed to it.

7. The Advisory Committee shall have general supervision of the operations of the Department, and see that they are conducted in accordance with the regulations.

The Committee shall hold stated meetings once in three months, at such time and place as they shall determine, and shall meet at other times at the call of the General Manager as chairman.

It shall be the duty of the chairman to call special meetings of the Committee upon the written request of three of its members.

8. The Superintendent shall have general charge of all the business pertaining to the Department and prescribe the forms and blanks to be used and the reports to be made to the Department.

He shall certify to the correctness of all bills, and check-rolls for employes, of the Department, and send them to the General Manager for approval.

He shall employ, with the approval of the General Manager, a Chief Clerk, Medical Examiners, and such other employes as may be necessary for the proper conduct of the business of the Department.

He shall furnish to the Advisory Committee such reports as they may require.

He shall be aided by an Assistant Superintendent, who, in the absence of the Superintendent, shall attend to his duties, and shall at all times perform such duties as may be assigned to him by the Superintendent.

9. Medical Examiners will be employed, who shall, under the direction of the Superintendent of the Relief Department, be assigned to districts; prepare applications for membership in the Relief Fund; see that members who are sick and injured are properly reported and attended to; ascertain and report upon their condition; in conference with attending physicians, decide when members are unfit for duty, and when they are able to return to duty; prepare claims for benefits payable on account of disability or death; certify to bills for surgical treatment; make the required physical examination of applicants for membership in the Relief Fund, and perform such other duties as may be required of them by the Superintendent of the Relief Department. The Medical Examiners shall not personally give surgical or medical attendance excepting in emergencies, and shall not accept fees for such attendance.

10. The moneys received for the Relief Fund shall be held by the Company in trust for the Relief Department. The Advisory Committee shall direct the investment, and any changes therein, of money which is not required to be kept on hand for current use.

The Company being the Trustee and Guarantor of the Fund, the investments shall be in such securities as shall have been approved by the Board of Directors, and shall be in the name of the Company, "in trust for the Relief Department."

If during the period prior to the first day of January, 1889, or during any one of the successive periods of three years thereafter, the amount contributed by the members of the Fund, and received from other sources, should not be sufficient to meet the liabilities incurred for such period, the Company will pay the deficiency, and if at the end of any such period there should be a surplus, after making due allowance for liabilities incurred and not paid, such surplus shall not be used to make up any deficiency in any other such period, but shall be used in the promotion of a fund for the benefit of superannuated members, or in some other manner for the sole benefit of members

of the Relief Fund, as shall be determined by vote of two-thirds of the Advisory Committee, and approved by the Board of Directors.

11. The fiscal year of the Relief Department shall begin with the first day of January of each year.

12. The condition of the Relief Fund at the close of each fiscal year shall be audited and reported on by a competent person or persons, selected for that purpose by those members of the Advisory Committee who are chosen to represent the members of the Relief Fund.

13. Amendments to or changes in the Relief Department may be proposed by the Advisory Committee, but such shall not be operative unless presented at a stated meeting of the committee, and considered and adopted at a subsequent stated or special meeting by a majority of the whole committee, and approved by the Board of Directors; and such amendments or changes adopted and duly announced, shall be binding upon the Company and the members of the Relief Fund from the dates fixed in the Resolutions approving the same.

#### *Membership.*

14. Those participating in the benefits of the Relief Fund must be employes of the Company, and will be known as "Members of the Relief Fund."

15. In referring to the employes of the Company, the expressions "service" and "in the service," will refer to employment upon or in connection with, any of the railroads or works the employes of which shall be admitted to membership in this Relief Fund, or in either of those associated in administration therewith, and the service of any employe shall be considered as "continuous" from the date from which he has been continuously employed, without interruption, upon or in connection with either of such railroads or works, or two or more of them successively.

16. Members will be classified according to the amount of their regular pay per month, as follows:

1st Class—Those receiving not more than forty dollars (\$40.00).

2d Class—Those receiving more than forty (40) and not more than sixty dollars (\$60.00).

3d Class—Those receiving more than sixty (60) and not more than eighty dollars (\$80.00).

4th Class—Those receiving more than eighty (80) and not more than one hundred dollars (\$100.00).

5th Class—Those receiving more than one hundred dollars (\$100.00.)

For members not paid by the month, the classes will be determined as nearly as possible by the usual amount of earnings per day multiplied by twenty-six (26).

Any employe becoming a member whose pay is within five dollars of the highest limit of the class determined by his pay may enter the next higher class if he so desires.

For persons in the service of two or more of the Companies associated in the administration of the Relief Department, the class will be determined by the total pay received from all such Companies, and the membership will be in the Fund of the Company from which the largest amount is received.

In cases of doubt as to the proper classification, the Superintendent of the Relief Department shall decide.

17. No employe will be required to become a member of the Relief Fund.

Any employe not over 45 years of age, who shall have been continuously in the service for a period of one calendar month, may become a member in



the class determined by his pay or any lower class, upon passing a satisfactory medical examination.

Any employé who has been continuously in the service for five (5) years immediately preceding February 1st, 1886, and any member of the Relief Fund who shall have been continuously in the service for five (5) years, including membership in the Relief Fund for one year immediately prior to his supplementary application, may, if not over forty-five (45) years of age, enter any class higher than that determined by his pay, upon passing a satisfactory medical examination.

Any member may, on application, change to a class lower than that in which he is contributing, or to a higher class, if not higher than that determined by his pay.

Any member whose pay is advanced may enter any higher class corresponding to his advanced pay without medical examination.

18. Any employé at the time of entering any class as a member of the Relief Fund, or within two (2) years thereafter may, upon passing a satisfactory medical examination, take additional death benefits of the first class to such extent that the whole amount of additional death benefits for which he shall at any time contribute shall not exceed the amount of the death benefit of the class in which he shall at the time be a member; provided that medical examination shall not be required of employés in the service prior to February 1st, 1886, upon availing themselves of this privilege within six months after that date.

19. Members of the Relief Fund may withdraw from the same on giving notice prior to the 25th day of any month on a printed form provided for the purpose, which can be obtained on application, from the persons in charge of the various sub-departments of the Company's service. The obligations and rights in connection with the Fund, of members giving such notice, will cease at the close of the month in which the notice is given, and no contribution will be made by any such withdrawing member on the pay-roll for that month.

20. In indicating the relations to the Company's service of employés relieved of employment and pay therein, the following terms shall be used:—

“Resigned” for those voluntarily leaving the service;

“Relieved” for those permanently relieved without fault on their part;

“Discharged” for those permanently relieved for cause;

“Furloughed” for those temporarily relieved without fault on their part;

“Suspended” for those temporarily relieved as a penalty for offences.

21. A member who is furloughed or suspended for a period extending beyond the date to which his contributions shall have been made, and not longer than nine (9) months, may keep up his title to benefits during such furlough or suspension, by paying his contributions in advance for each month, and in other respects complying with the Regulations.

If a member who is absent from duty by reason of furlough or suspension or other cause than disablement and not receiving wages, shall fail to contribute for a period of three consecutive calendar months, his membership shall cease at the expiration of that time. If contribution by such member is resumed at or before the expiration of three consecutive calendar months, the title to benefits shall recommence upon the date from which contribution is resumed.

#### *Applications.*

22. Participation in the benefits of the Relief Fund must be based upon an application by the proposed member, in the form prescribed in Reg-



ulation No. 23, approved by the Superintendent of the Relief Department, and upon a certificate of membership issued by him to the applicant.

23. Applications shall be in the following form:—

APPLICATION FOR MEMBERSHIP IN THE RELIEF FUND.

*To the Superintendent of the Relief Department:*

I, . . . . . of . . . . . in the county of . . . . . and State of . . . . . employed in the service of the Pennsylvania Railroad Company, as . . . . . the . . . . .

do hereby, by reason of each employment, apply for membership in the Relief Fund and consent and agree to be bound by the Regulations of the Relief Department of the said Company as contained in the book of said Regulations, approved by the Board of Directors, which I have read or have had read to me, and by any other regulations of the said Department hereafter adopted, and by the provisions of any agreement or agreements made by the said Company with any other corporation or corporations associating in administration of their respective Relief Departments, in accordance with said book of Regulations.

*I also agree*, That the said Company, by its proper agents, and in the manner provided in said Regulations, shall apply as a voluntary contribution from any wages earned by me under said employment or from benefits that may hereafter become payable to me, at the rate of . . . . . per month, for the purpose of securing the benefits provided for in the Regulations for a member of the Relief Fund of the . . . . . class, and additional Death Benefit, equal to . . . . . the Death Benefit of the first class. Death Benefits shall be payable to . . . . .

[*Here designate the beneficiary or beneficiaries.*]

And I agree that the acceptance of benefits from the said Relief Fund for injury or death shall operate as a release of all claims for damages against said Company, arising from such injury or death, which could be made by or through me, and that I or my legal representatives will execute such further instrument as may be necessary formally to evidence such acquittance.

*I also agree*, That this application, when approved by the Superintendent of the Relief Department, shall make me a member of the Relief Fund, and constitute a contract between myself and the said Company, and that the terms of this application and the Regulations of said Department shall, during my membership, be a part of the conditions of my employment by the Company, and that the same shall not be avoided by any change in the character of my service, or locality where rendered, while in such employment, nor by any change in the amounts applicable from my wages to the Relief Fund, which I may hereafter consent to, and that the agreement that the above-named amounts shall be appropriated from my wages, shall apply also to any other amounts arising from changes made as aforesaid and shall constitute an appropriation and assignment in advance, to the said Company in trust, for the purposes of the Relief Fund, of such portions of my wages, which assignment shall have precedence over any other assignment by me of my wages, or of any claim upon them on account of liabilities incurred by me.

*I also agree*, for myself, and those claiming through me, to be especially bound by Regulation numbered 65, providing for final and conclusive settlement of all disputes, by reference to the Superintendent of the Relief Department and an appeal from his decision to the Advisory Committee.

*I certify*, That I am correct and temperate in my habits; that so far as I am aware, I have no injury or disease, constitutional or otherwise, which will tend to shorten my life, and am now in good health and able to earn a livelihood.

*I do hereby further acknowledge, consent and agree*, That any untrue or fraudulent statement made by me to the Medical Examiner, or any concealment of facts in this application, or my resignation from the service of the said Company or my being relieved from employment and pay therein at the pleasure of the Company or its proper officers, shall forfeit my member-

ship in the aforesaid Relief Fund and all benefits, rights or equities arising therefrom, excepting that my leaving the service shall not (in the absence of any of the other foregoing causes of forfeiture) deprive me of any benefits to the payment of which I shall have previously become entitled by reason of accident or sickness occurring while in the service.

*In Witness Whereof*, I have signed these presents at . . . in the county of . . . State of . . . this . . . day of . . . A. D. 18 . . .

*Witness:* (Signature.)

The foregoing application is approved at the office of the Superintendent of the Relief Department at . . . in the county of . . . State of . . . this . . . day of . . . A. D. 18 . . .  
(Signature).

*Superintendent of the Relief Department.*

For employés, who by the regulations, are not required upon application to pass a medical examination, the above form shall be modified by omitting or erasing the words underlined.

Preliminary notice of request for membership shall be in such form as the Superintendent of the Relief Department shall prescribe.

The following form of supplementary application shall be used for members applying to enter higher or lower classes, or for additional Death Benefit or reduction therein.

#### SUPPLEMENTARY APPLICATION.

*To the Superintendent of the Relief Department:*

I, . . . of . . . in the county of . . . State of . . . an employé in the service of the Pennsylvania Railroad Company and a member of the Relief Fund thereof, by virtue of my former principal application under and subject to the conditions recited in said principal application and upon the terms thereof, unless, and only so far as, herein modified, do hereby make this supplementary application for the following, namely:—

[*Here specify character of benefits applied for.*]

*In Witness Whereof*, I have signed these presents at . . . in the county of . . . State of . . . this . . . day of . . . A. D. 18 . . .

*Witness:* (Signature.)

The foregoing supplementary application is approved at the office of the Superintendent of the Relief Department at . . . in the county of . . . State of . . . this . . . day of . . . A. D. 18 . . .  
(Signature)

*Superintendent of the Relief Department.*

24. When a member of the Relief Fund of either of the Companies which may be for the time being associated in the joint administration of their Relief Departments, shall be permanently transferred to the service of any other of those Companies, notice of such transfer shall be sent by the officer under whom he has been employed, to the Superintendent of the Relief Department, and thereupon his membership shall be transferred to the Relief Fund of the Company to whose service he has been transferred, from the date of such transfer.

25. Immediately upon any one entitled to membership signifying a desire to become a member of the Relief Fund, notice of the same shall be sent from his employing officer in the manner required, to the Superintendent of the Relief Department, and to the Medical Examiner of the district in which the person is employed. The latter will as soon thereafter as possible make the necessary inquiries of the applicant, and medical examination when such is

required, advise the proper employing officer and the applicant of the result, and, if it is favorable, complete and forward the application.

26. Applications shall take effect at their dates, excepting as to persons not on duty, in which cases they will take effect at any subsequent dates upon which the applicants go on duty.

27. An application may be dated upon any date in the month next following that in which it is signed, if the applicant desires it to take effect upon such date.

28. An applicant may, in his application or subsequently, designate a beneficiary to receive his death benefit other than relatives entitled to recover the amount payable in the event of the death of the applicant, on giving good and sufficient reasons for such designation.

29. Benefit payable on account of the death of a member, shall be payable only to the beneficiary or beneficiaries designated in his application to receive the same, if living at the death of said member. If the designated beneficiary shall not be living at the death of said member, then the benefit shall be payable to the wife (or husband), or in the event of the applicant at death having no wife (or husband) living, then to the children of the member collectively, each to be entitled to an equal share, including, as entitled to the parent's share, the issue of any deceased child, or, if there be no children or such issue living, then to the father and mother of the deceased member jointly or the survivor, or if neither of these be living, then to the next of kin if there be any such, payment in behalf of such next of kin to be made to the legal representatives of the deceased member. If there be no relatives living, the benefits otherwise payable shall lapse and the amount thereof shall remain as a part of the Relief Fund, without claim for the same, and the necessary funeral expenses and proper expenses incident to the disability and death of the deceased member, shall, in such case, be paid from the Fund.

30. Unless otherwise directed by the Superintendent of the Relief Department, an application of a married women must be signed also by her husband, and that of a minor by the father or other legal guardian.

#### *Contributions.*

31. The word "contribution," wherever used in the Regulations, or in the Organization adopted in connection therewith, shall be held and construed to refer to such designated portion of the wages payable by the Company, to an employé as he shall assent to receiving through the right which he shall derive to benefits by the instrumentality of the Relief Fund, and the words "contributors," "contributing employés" and like words and phrases are descriptive of employés giving such assent.

32. Contributions shall be made monthly in advance, at the following rates: For the first class, seventy-five (75) cents per month; for the second class, twice as much (\$1.50); for third class, three times as much (\$2.25); for the fourth class, four times as much (\$3.00); and for the fifth class, five times as much as for the first (\$3.75).

33. The contribution for part of a month shall be a proportional part of the amount for a whole month, and an amount to be collected or refunded for part of a month shall be estimated at one-thirtieth part of the amount for the whole month, for each day, adding to make even cents where fractions occur. The time for which such estimate is made shall include the date upon which an application takes effect or a member goes on duty after absence, and shall exclude all after the date upon which membership ceases



34. The rates per month of contributions for death benefits only, additional to the death benefit of a member's class, shall be as follows:—

For a member not over forty-five (45) years of age, thirty (30) cents; over forty-five (45) and not over sixty (60) years, forty-five (45) cents; and over sixty years of age, sixty (60) cents. If a member shall have taken any additional death benefit and shall increase the amount after his age requires a higher rate than he before contributed, the higher rate shall apply only to the increase.

35. Contribution for a whole month will be due on the first day of such month. It will ordinarily be deducted from the gross amount of the members' wages on the pay-roll of the preceding month and placed to his credit in the Relief Fund.

36. When an application is to take effect upon the first day of a month, the contribution for that month shall be made on the roll of the preceding month, if the application is received by the 25th of the latter month. In other cases the contribution for a month or any unexpired part of a month in which an application takes effect or a member goes on duty after absence, shall be made on the roll of that month, together with the contribution for the next month.

If absence is from disablement and the member shall recover in a month for which he has not contributed, he shall not contribute for the remainder of that month, but will be entitled to benefits for disablement or death occurring during such month.

After recovery from disablement, contribution for the whole of the next month, when not otherwise paid, shall be deducted from wages earned or benefits payable; and if the recovered member, by reason of furlough or suspension, does not return to duty until after the first of the month following recovery, he shall nevertheless be entitled to benefits for disablement or death occurring at any time in that month, but not for that occurring in any succeeding month for which he shall not have contributed in advance.

37. A member who, for other reason than disability, earns no wages in a month, from which his contribution may be made, shall not be entitled to benefits in the next month, unless he shall have otherwise made the proper contribution in advance. Such contribution made after the first day of the month for which it is intended shall be only for the remaining part of the month, including the date on which it is paid, and shall not entitle to benefits for disablement or death occurring prior to that date.

38. When a member is disabled or dies in the month in which his application takes effect, his contribution for that month will be deducted from the wages earned therein or from the benefits payable if the wages are not sufficient, and the amount of contribution shall be for the unexpired part of the month, commencing with the date upon which the application takes effect.

39. A member shall not make contribution for any time during which he is entitled to disablement benefits, after the month in which the disability begins. When wages are paid during disability the usual contribution will be made.

40. No contribution is to be deducted from the final payment of wages to a member leaving the service, excepting for contributions in arrears, and there shall be returned to him so much of his last contribution as covers the part of the month succeeding the date on which he leaves the service, for which he must give a receipt in the prescribed form.



When the amount cannot be otherwise learned, it will be ascertained from the Superintendent of the Relief Department.

41. No part of the contribution of a member will be refunded in the event of his death.

*Benefits.*

42. Members will be entitled to the following benefits:—

*First.*—Payments while disabled by accident in the Company's service, for each day during a period not longer than fifty-two (52) weeks, at the rate of fifty (50) cents per day for a member of the first class, and of greater amounts for members of the other classes, in proportion to their contributions; and at half these rates after fifty-two (52) weeks and during the continuance of the disability.

*Second.*—Payments while disabled by sickness or by injury other than accident in the Company's service, for each day after the first three (3) days of such disability, and for a period not longer than fifty-two (52) weeks, at the rate of forty (40) cents per day for a member of the first class, and of greater amounts for the other classes, in proportion to their contributions, provided that if upon the decision of the Medical Examiner, a member shall have returned to duty after disability from sickness, and shall again be disabled by sickness within less than two (2) weeks from his return to duty, such disablement shall be counted with the prior one in computing the fifty-two (52) weeks for which payments may be made, and the deduction of three (3) days shall not be made therefrom.

A member, after receiving for fifty-two (52) weeks the payments herein provided for, shall, by contributing for the death benefit, retain the title to payments in the event of death occurring while continuing disabled and unable to engage in any occupation. In such case the contribution for each death benefit of the first class to which the member's class entitles him shall be at the rate in Regulation 34 applicable to the age at which he entered the class in which he last contributed, and for his additional death benefit at the rate he last contributed for the same. If such member shall be declared by the Medical Examiner able to return to duty, and shall so return and resume full contribution, he shall be entitled to payments for disablement by accident occurring thereafter in the Company's service, and to payments for disablement by sickness occurring after he shall have been continuously engaged in the performance of duty for a period of four weeks.

*Third.*—A payment, upon the conditions prescribed in the Regulations, on the death of a member from accident or other cause, occurring during time for which he shall have contributed, or while receiving disablement benefits, or during a month in which he shall have recovered from disability, of two hundred and fifty dollars (\$250) for a member of the first class, and of greater amounts for the other classes, in proportion to their contributions.

*Fourth.*—Provision for necessary surgical attendance during disability from accident occurring to members while in the discharge of duty as employés of the Company.

43. The following table exhibits the amounts of the contributions and benefits of the several classes:—

	First Class.	Second Class.	Third Class.	Fourth Class.	Fifth Class.
Highest monthly pay for each class. . . . .	\$40 00	\$60 00	\$80 00	\$100 00	Over \$100 00
Rates of contribution per month. . . . .	75	1 50	2 25	3 00	3 75
Accident benefits per day :					
First fifty-two weeks. . . . .	50	1 00	1 50	2 00	2 50
After fifty-two weeks. . . . .	25	50	75	1 00	1 25
Sick benefits per day not including first three days, and not longer than fifty-two weeks. . . . .	40	80	1 20	1 60	2 00
Payments in the event of death. . . . .	250 00	500 00	750 00	1,000 00	1,250 00

44. Benefits and other claims upon the Relief Fund, shall be paid out in conformity with the financial methods of the Company and on orders of the Superintendent of the Relief Department, upon his receiving satisfactory certificates respecting the claims from the Medical Examiners and other proper officers.

45. Payments on account of disablement by accident will only be made upon the disablement being shown to have resulted solely from accidents occurring to members in the performance of duty in the service of the Company, to which they were assigned, or which they were directed to perform, by proper authority or in voluntarily protecting the Company's property. This shall include accidents occurring to members at points upon the Company's property which they are required to pass, when going to or from work, and which do not result from their voluntarily or unnecessarily exposing themselves to danger. There must be exterior or other positive evidence of injury, and satisfactory evidence that it renders the person totally unable to labor, or when of a permanent character, to earn a livelihood in an employment suited to his capacity. Disablement from accident occurring otherwise than as aforesaid, will be classed with sickness.

Questions as to the permanent character of disability and the continued payment of benefits on account of the same, shall be determined by the Advisory Committee.

46. If a member of the Relief Fund who has recovered from disability from accident in the Company's service, shall continue disabled from sickness or debility, he shall be entitled to sick benefit to a date not later than that to which he would have been entitled thereto if the whole of the disability had been from sickness, and at corresponding rate.

47. If a member of the Relief Fund shall die during disablement from accident or sickness, the death benefit which may be payable shall not be subject to deduction of previous payments of disablement benefits.

48. A member of the Relief Fund shall be entitled to benefits in the event of disablement or death during the time intervening between the first of the month and payment of his wages, and also from the date his application takes effect, and from any date upon which, after absence, he returns to duty in a month for which he has not contributed, notwithstanding the fact that his contribution shall not be actually made until the payment of wages from which it is to be deducted.

49. An employé entitled to become a member, who shall have applied for membership, shall not be debarred from receipt of benefits for disablement or death from accident in the service, because of his application not having been approved. if before medical examination, or during the consideration of

his application, an accident shall occur to him in the discharge of his duty as employé. The same rule shall be applicable as to other than accident benefits for any one who shall have passed a satisfactory medical examination, and in whose case there are no circumstances warranting the rejection of his application, and who shall meet with disablement or death before his application shall have been formally approved. In such cases contributions previously made, will be retained, or the proper amounts will be deducted from wages earned, or from benefits payable if the wages payable be not sufficient. In other cases contributions made by those whose application are not approved will be refunded.

50. Unless specially otherwise arranged with the Superintendent of the Relief Department, benefits will not be paid on account of accident, sickness or death, occurring at any place beyond the jurisdiction of the United States, or on account of sickness or death, occurring to a member from epidemic disease of a dangerous character, at any place where such disease is known to prevail, and to which his duties as an employé in the Company's service, or in his family relations, do not require him to go, and contributions will be refunded which cover any time subsequent to the date upon which members, though on furlough, may go to such places.

51. Members will not be entitled to receive disablement benefits for time for which wages are paid them by the Company. In computing benefits, the time of disablement shall be taken as commencing upon the first day of the disablement upon which a full day's wages are not paid.

52. Benefits will not be paid for disability arising from sickness contracted and injuries received by members while intoxicated or off duty in consequence of intoxication, or from injuries received while engaged in unlawful acts; or for disease or death resulting from their immoralities or from the intemperate use of stimulants or narcotics; or for death by the hands of justice.

53. Benefits on account of continued disability will be paid monthly. When amounts payable at the end of a month can be ascertained by the fifth of the succeeding month they will be paid not later than the twentieth of that month. Benefits for shorter periods of disablement will be paid at once on the amounts being ascertained.

54. Claims for death benefits will be payable within thirty days after the required evidence is furnished of their validity.

A part may be paid before the final settlement, to meet funeral or other urgent expenses incident to the death of a member; provided that any such payment without the written authority of the persons to whom the death benefit is payable, shall not exceed the sum of sixty dollars for funeral expenses alone, nor the sum of one hundred dollars for funeral and other expenses; unless the whole or part of the persons to whom the death benefit is payable cannot be found, or are in foreign country or at points so distant that they cannot be conveniently communicated with, or there are no such persons living; in which cases the Superintendent of the Relief Department may make such payments, as a part of the death benefit as in his judgment may be reasonable, for the proper burial of the deceased member and the payment of expenses necessarily incident to his death or disablement prior to death.

55. Benefits payable on account of disablement of a member by accident or sickness shall be payable only to the disabled member. Any such benefits remaining unpaid at the death of a member shall be paid to the person or persons entitled to receive the death benefit.



56. Members shall not be entitled to benefits who shall decline to permit the Medical Examiners to ascertain their condition while disabled, or who shall at such times absent themselves from home and shall be in places so distant that the Medical Examiners cannot be expected to visit them, unless satisfactory statements as to their condition shall be furnished by them, from reputable attending physicians.

*Miscellaneous.*

57. Freight and Passenger Agents will cash orders for claims upon the Relief Fund, excepting for death benefits, when the funds of the Company in their hands will permit, and use the same as vouchers in settlement with the Accounting Department.

For contributions returned, receipts must be taken in the prescribed form and sent to the Superintendent of the Relief Department, who shall prepare a voucher for the same in favor of the officer paying them.

Death benefits will be paid by vouchers, which will be cashed by the Treasurer or designated depositories of the Company.

58. Should a member or his legal representative bring suit against the Company, or against any other corporation which may be at the time associated therewith in administration of the Relief Departments, in accordance with the terms set forth in Regulation No. 6, for damages on account of injury or death of such member, payment of benefits from the Relief Fund, on account of the same, shall not be made, until such suit is discontinued. If prosecuted to judgment or compromised, any payment of judgment or amount in compromise shall preclude any claim upon the Relief Fund for such injury or death.

59. The Superintendent of the Relief Department and the Medical Examiners are to be informed at once, in the manner provided, of accidents or sickness occurring to members.

60. Members who shall be absent from duty on account of sickness or injury must at once notify the person who keeps the record of their time, and they will not be entitled to benefits for time previous to such notice, unless the delay shall have been unavoidable and the reason is stated.

61. Members must keep their foremen or time-keepers informed of their addresses and of any changes of the same.

62. The responsibility of the Relief Department to any member shall end when he ceases to be employed by the Company, excepting for benefits to the payment of which he shall have become previously entitled by reason of accident or sickness occurring while in the service.

63. When a member leaves the service he must surrender his Certificate of Membership to the person from whom he receives his final payment of wages.

64. The officer of the Superintendent of the Relief Department, with the records thereof, shall be located at such point as shall from time to time be designated by the General Manager, either upon the lines of railroad owned or operated by the Company, or upon lines of railroad owned or operated by any Company with which it may become associated in the administration of the Relief Department.

65. All questions or controversies of whatsoever character arising in any manner, or between any parties or persons in connection with the Relief Department, or the operation thereof, whether as to the construction of language or meaning of the Regulations of the Relief Department, or as to



any writing, decision, instruction or acts in connection therewith, shall be submitted to the determination of the Superintendent of the Relief Department, whose decision shall be final and conclusive thereof, subject to the right of appeal to the Advisory Committee within thirty days after notice to the parties interested, of the decision.

When an appeal is taken to the Advisory Committee it shall be heard by said Committee without further notice at their next stated meeting, or at such future meeting or time as they may designate, and shall be determined by vote of the majority of a quorum, or of any other number not less than a quorum of the members present at such meeting, and the decision arrived at thereon by the Advisory Committee shall be final and conclusive upon all parties without exception or appeal.

### PENNSYLVANIA LINES WEST OF PITTSBURGH.

The regulations of the association organized in 1889, for the benefit of the employes on the lines west of Pittsburgh are similar to those of the above association. The following statements concerning membership, receipts, payments, etc., are worth adding:

#### MEMBERSHIP, DECEMBER 31, 1890.

COMPANIES AND DIVISIONS.	Employés.	Members.	Per cent.
Pennsylvania Company—			
Eastern division, . . . . .	3,836	1,839	47.9
Western division, . . . . .	4,257	1,441	33.9
C. & P. division, . . . . .	2,044	1,117	54.6
E. & A. division, . . . . .	1,375	570	41.5
Toledo division, . . . . .	451	165	36.6
I. & V. division, . . . . .	264	143	54.2
Total Pennsylvania Company, . . .	12,227	5,275	43.1
P., C., C. & St. L. Ry. Company—			
Pittsburgh division, . . . . .	5,500	2,335	42.4
Cincinnati division, . . . . .	1,669	1,118	67.0
Indianapolis division, . . . . .	1,675	777	46.4
Chicago division, . . . . .	2,236	1,178	52.7
Richmond division, . . . . .	628	350	55.7
Louisville division, . . . . .	931	341	36.6
Total P., C., C. & St. L. Ry. Co., . .	12,639	6,099	48.3
General employés, including Union Line,	1,028	397	38.6
Grand total, . . . . .	25,894	11,771	45.5

## AGGREGATE MEMBERSHIP DECEMBER 31, 1890.

Accessions—total, . . . . .				15,205
Cessations—Rejected, . . . . .			70	
Resigned, . . . . .	2,024			
Relieved, . . . . .	237			
		2,261		
Discharged, . . . . .		666		
			2,927	
Withdrew, . . . . .			243	
Regulation 21, . . . . .			23	
Died, accident, . . . . .		50		
Died, natural, . . . . .		122		
			171	
				3,434
Net membership, December 31, 1890, . . . . .				11,771

## SUMMARY.

Pennsylvania Company fund, including 319 general employés, . . 5,594

P., C., C. & St. L. R'y Co. fund, including 78 general employés, . . 6,177

Total membership, . . . . . 11,771

RECEIPTS, DISBURSEMENTS, AND BALANCES OF THE RELIEF FUNDS, DE-  
CEMBER 31, 1890.

	Pennsyl- vania Com- pany.	P., C., C. & St. L.	Total.
Balances June 30, 1890, . . . . .	\$21,479 24	\$11,314 01	\$32,793 25
Receipts, six months,			
Contributions from members, . . . . .	54,040 66	55,610 24	109,650 90
Contributions from companies for company relief, . . . . .	70 40	62 80	133 20
Interest at 4 per cent. per annum on monthly balances, . . . . .	586 74	312 93	899 67
Total, . . . . .	\$76,177 04	\$67,299 98	\$143,477 02
Disbursements, six months,			
Death benefits, accident, . . . . .	\$5,000 00	\$11,250 00	\$16,250 00
Death benefits, natural, . . . . .	17,750 00	19,000 00	36,750 00
Total deaths, . . . . .	\$22,750 00	\$30,250 00	\$53,000 00
Disablement benefits,			
Accident, . . . . .	\$10,979 50	\$14,378 75	\$25,358 25
Surgical attendance, . . . . .	500 85	764 00	1,264 85
Sickness, . . . . .	16,334 80	18,554 40	34,889 20
Company relief, . . . . .	64 40	62 80	127 20
Total disablement, . . . . .	\$27,879 55	\$33,759 95	\$61,639 50
Total disbursements, . . . . .	\$50,620 55	\$64,009 95	\$114,639 50
Balances, Dr., . . . . .	\$25,547 49	\$3,290 03	\$28,837 52
Deduct,			
Outstanding disablement benefit orders, . . . . .	\$5,173 00	\$5,996 30	\$11,169 30
Estimated cost of continued cases of disablement, including probable death, . . . . .	10,059 85	14,954 00	25,013 85
Death benefits accrued and unpaid, . .	1,000 00	250 00	1,250 00
Total deductions, . . . . .	\$16,232 85	\$21,200 30	\$37,433 15
Net balances, Dr., . . . . .	\$9,314 64		
Cr., . . . . .		\$17,910 27	\$8,595 63

## TOTAL MORTUARY RISKS.

Pennsylvania Company, . . . . .	\$3 241,250 00
P., C., C. & St. L. Railway Company, . . . . .	3,570,250 00
Total, . . . . .	<u>\$6,811,500 00</u>

## THE BALTIMORE AND OHIO RAILROAD EMPLOYÉ'S RELIEF ASSOCIATION.

The Baltimore and Ohio Railroad Company is empowered to give such aid to the Association by contributions of money or otherwise, on such terms and conditions as the president and directors may prescribe. Acting under this charter, and in accordance with its provisions, the board of directors of the Baltimore and Ohio Railroad Company passed a resolution guaranteeing the engagements of the Relief Association and authorizing the contribution of \$100,000 from the funds of the company as a nucleus of a fund for the support of the association, upon condition that the employés would second its endeavor to promote their welfare by contributing to the fund in such a degree as would secure its permanency and effectiveness.

The company also agreed to give, without expense to the fund, the services of its staff in conducting the clerical and other business necessary to its proper management, viz: room for its records, etc., and whenever necessary or desirable to employ females or children for such work as they were qualified to perform, to give preference to the widows, wives, sisters and children of those contributing to this fund.

Provision was also made for the free transportation of the children of such contributors over all the lines of the company, while attending school and for half-fare transportation to the members and their families whenever traveling over its lines.

It was also agreed by the railroad company to contribute the annual sum of \$25,000 for the purpose of creating a pension or superannuation fund, to which has been added the \$6,000 annually received from the investment of the \$100,000 originally donated by the company.

In the announcement to the employés of the establishment of the association, it was distinctly set forth that those persons in the service at that time had the privilege of becoming members of the association or not, and that their interests would in no degree be prejudiced by their declining to contribute to this fund.

The first question presented in instituting the association was the advisability of a distinction in rates on account of age.

It was well known that all insurance companies select their risks. It was early apparent that the railroad company, however, could make no distinction against any of its employés in this respect.

The next consideration was the classification of risks in respect to occupations. It was manifestly unfair that those not engaged in operating trains or rolling stock should be required to pay as much for



indemnity in the event of accidental injury as those so engaged, and it was finally agreed to divide the employés of the service into these two general classes. In order to provide relief in cases of sickness or injury, which would in some degree approximate the wages earned, the following classification of contributors was agreed upon, showing the rate of pay and the premium to be paid to secure the benefits thereunder:

	A.	B.	C.	D.	E.
Rates of contribution per month—					
First class, . . . . .	\$1 00	\$2 00	\$3 00	\$4 00	\$5 00
Second class, . . . . .	75	1 50	2 25	3 00	3 75
Entitling to benefits—					
For accidental injuries per day, not including Sundays and legal holidays—					
First 26 weeks, . . . . .	50	1 00	1 50	2 00	2 50
After 26 weeks, . . . . .	25	50	75	1 00	1 25
For sickness per day, not including first six working days, Sundays or legal holidays, for 52 weeks, . .	50	1 00	1 50	2 00	2 50
In the event of death from—					
Accidental injuries, . . . . .	500 00	1,000 00	1,500 00	2,000 00	2,500 00
Natural causes, . . . . .	250 00	500 00	750 00	1,000 00	1,250 00

While, under this schedule, no employé was permitted to take a less number of rates, or benefits, than his wages assigned him, he could take as many more up to the limit as he chose.

The matter of collection of premiums is disposed of by simply deducting the small monthly sum required from the wages earned, thereby avoiding the risk attending the handling of funds by irresponsible parties and relieving the minds of contributors of any uncertainty or uneasiness on the score of whether their policies are in force or not.

It will be noted that no fee for initiation, medical examination, policy etc., as is usual in the ordinary companies, is charged. The table above given practically shows the rates and benefits guaranteed to be paid under the constitution. It is perhaps, proper to say, however, that the association agrees to provide, for the premiums paid:

FIRST.—Free surgical attendance for its members when injured by accident, in the discharge of duty, while in the service of the railroad company.

SECOND.—The payment of a per diem allowance, ranging from 50 cents to \$2.50 for each working day lost by every contributor injured by accident in the manner stated above; this allowance to be reduced one-half after six months disability. It will be noted that this section provides for the payment of *every* working day, whether it be one day or more.

THIRD.—When a contributor is killed or dies from the effects of an accident of the class above described, at the time, or within six months after its occurrence, his family will receive from \$500 to \$2,500, according to the number of rates for which he had subscribed.

FOURTH.—The payment of a per diem allowance ranging from 50 cents to \$2.50 in cases of disablements resulting from sickness, or injury received in any other manner than in the discharge of duty in the company's service. These payments, however, are not to be made unless the contributor has been so disabled for more than six days, in which event payment is made for each working day lost after the first six working days. These payments only continue one year after the employé ceases to contribute to the relief fund.

FIFTH.—The payment to the beneficiary of a contributor in the event of his death from natural causes, or from injury received other than in the discharge of duty in the company's service, of sums ranging from \$250 to \$7,500, according to the premium paid.

SEVENTH.—Unlike all other insurance or beneficial societies, the member is not required to pay any premiums during the time he may be disabled by sickness or injury, and no deduction is made from his benefits on this account.

No person is entitled to receive any compensation by reason of his services upon the committee of management or board of trustees.

The moneys of the association are entrusted to the custody of the treasurer of the Baltimore and Ohio Railroad Company, subject to the proper requisitions thereon, and all surplus funds not wanted for immediate use are invested by the managers in such stocks and bonds as they may approve.

Provision is made for the settlement of any differences arising between the claimants for benefits and the committee of management, by arbitration, one arbitrator to be selected by each party and the third by the two thus chosen.

The pension feature was inaugurated on October 1, 1884, and the income necessary for its support is derived entirely from the Baltimore and Ohio Railroad Company, no portion of the contributions of members of the association being diverted for the support of this feature.

The object of this feature is:

FIRST.—To provide means of support, during life, for those persons who have been members of the association for four consecutive years and who, having served the Baltimore and Ohio Railroad Company, or any other company whose employés are admitted to membership in the Relief Association (and which companies have made a proportionate contribution to the pension fund) for ten consecutive years, who, upon reaching the age of 60 or upwards, are relieved from duty by such company, or who, having reached the age of 65, or upwards, elect to retire from such company's service.

SECOND.—To provide means of support, during life, for such members of the association as, having received a year's sick allowance, shall not be entitled to further benefits from the relief fund, yet remain totally unable to earn a livelihood. The per diem allowance, under the pen-

sion feature, equals one-half of the per diem made on account of sick benefits, and is increased five per cent. for each five years' membership in the Relief Association, after the expiration of the first ten years.

The following table shows the per diem allowance to pensioners under this feature and the percentage of increase for longevity membership in the association:

TABLE SHOWING PER DIEM PENSION ALLOWANCE TO MEMBERS OF RELIEF ASSOCIATION.

	Ten years' membership and under, one-half sick rate.	Fifteen years' membership, 5 per cent. additional.	Twenty years' membership, 10 per cent. additional.	Twenty-five years' membership, 15 per cent. additional.	Thirty years' membership, 20 per cent. additional.	Thirty-five years' membership, 25 per cent. additional.	Forty years' membership, 30 per cent. additional.	Forty-five years' membership, 35 per cent. additional.	Fifty years' membership, 40 per cent. additional.	Fifty-five years' membership, 45 per cent. additional.
Those entitled, under relief features, to one benefit, . . .	\$0 25	1 <sup>1</sup> / <sub>4</sub> * \$0 26 <sup>1</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>2</sub> * \$0 27 <sup>1</sup> / <sub>2</sub>	3 <sup>3</sup> / <sub>4</sub> * \$0 28 <sup>3</sup> / <sub>4</sub>	5* \$0 30	6 <sup>1</sup> / <sub>4</sub> * \$0 31 <sup>1</sup> / <sub>4</sub>	7 <sup>1</sup> / <sub>2</sub> * \$0 32 <sup>1</sup> / <sub>2</sub>	8 <sup>3</sup> / <sub>4</sub> * \$0 33 <sup>3</sup> / <sub>4</sub>	10* \$0 35	11 <sup>1</sup> / <sub>4</sub> * \$0 36 <sup>1</sup> / <sub>4</sub>
Those entitled, under relief features, to two benefits, . .	\$0 50	2 <sup>1</sup> / <sub>2</sub> * \$0 52 <sup>1</sup> / <sub>2</sub>	5* \$0 55	7 <sup>1</sup> / <sub>2</sub> * \$0 57 <sup>1</sup> / <sub>2</sub>	10* \$0 60	12 <sup>1</sup> / <sub>4</sub> * \$0 62 <sup>1</sup> / <sub>4</sub>	15 \$0 65	17 <sup>1</sup> / <sub>2</sub> * \$0 67 <sup>1</sup> / <sub>2</sub>	20* \$0 70	22 <sup>1</sup> / <sub>2</sub> * \$0 72 <sup>1</sup> / <sub>2</sub>
Those entitled, under relief features, to three benefits, . .	\$0 75	3 <sup>3</sup> / <sub>4</sub> * \$0 78 <sup>3</sup> / <sub>4</sub>	7 <sup>1</sup> / <sub>2</sub> * \$0 82 <sup>1</sup> / <sub>2</sub>	11 <sup>1</sup> / <sub>4</sub> * \$0 86 <sup>1</sup> / <sub>4</sub>	15* \$0 90	18 <sup>3</sup> / <sub>4</sub> * \$0 93 <sup>3</sup> / <sub>4</sub>	22 <sup>1</sup> / <sub>2</sub> * \$0 97 <sup>1</sup> / <sub>2</sub>	26 <sup>3</sup> / <sub>4</sub> * \$1 01 <sup>3</sup> / <sub>4</sub>	30* \$1 05	33 <sup>3</sup> / <sub>4</sub> * \$1 08 <sup>3</sup> / <sub>4</sub>
Those entitled, under relief features, to four benefits, . .	\$1 00	5* \$1 05	10* \$1 10	15* \$1 15	20* \$1 20	25* \$1 25	30* \$1 30	35* \$1 35	40* \$1 40	45* \$1 45
Those entitled, under relief features, to five benefits, . .	\$1 25	6 <sup>1</sup> / <sub>4</sub> * \$1 31 <sup>1</sup> / <sub>4</sub>	12 <sup>1</sup> / <sub>2</sub> * \$1 37 <sup>1</sup> / <sub>2</sub>	18 <sup>3</sup> / <sub>4</sub> * \$1 43 <sup>3</sup> / <sub>4</sub>	25* \$1 50	30* \$1 56 <sup>1</sup> / <sub>4</sub>	37 <sup>1</sup> / <sub>2</sub> * \$1 62 <sup>1</sup> / <sub>2</sub>	43 <sup>3</sup> / <sub>4</sub> * \$1 68 <sup>3</sup> / <sub>4</sub>	50* \$1 75	56 <sup>1</sup> / <sub>4</sub> * \$1 81 <sup>1</sup> / <sub>4</sub>



Provision is made to prevent the sale, assignment or transfer of any right to any pension to any person and also against any loss of pension by reason of attachment or other legal process. Provision is also made for furnishing artificial limbs or money commutation equal to the cost of the artificial limb.

The following table will show what work has been done and what good accomplished by the Baltimore and Ohio Employés Relief Association from the data of its inauguration, May 1, 1880, to September 30, 1887 :

*Benefits paid by B. & O. Employés Relief Association and this Department from May 1st, 1880, to September 30th, 1890.*

	Number.	Cost.	Average per payment.
Deaths from accident, . . . . .	612	\$635,021 78	\$1,037 61
Deaths from other causes, . . . . .	1,175	466,610 70	397 11
Disabilities from accidental injuries received in discharge of duty, . . . . .	30,339	407,514 08	13 43
Disabilities from sickness and other causes than as above, . . . . .	52,046	774,510 26	14 88
Surgical expenses, . . . . .	19,206	119,523 36	6 22
Aggregate, . . . . .	103,378	\$2,403,180 18	\$23 24
Add disbursements for expenses, etc., during same period, . . . . .		337,967 44	. . . . .
Total disbursements for all purposes, . . . . .		\$2,741,147 62	. . . . .

The savings fund of the association affords facilities to employés and their wives, no matter how isolated their location, to invest savings or make temporary deposits in the fund, and they may make such deposits in larger sums and with more frequency than is allowed by other savings banks. Upon the lines of the Baltimore and Ohio Railroad, extending from Baltimore to Chicago, there are no savings banks, with the exception of the cities of Washington and Pittsburgh, and for this reason, prior to the establishment of the savings fund of the Baltimore and Ohio Employés Relief Association, no facilities were afforded members to deposit their savings where they could earn any interest. By the introduction of the savings fund any employé can secure a pass-book and deposit his money with the station agent with absolute safety, the Baltimore and Ohio Railroad Company guaranteeing that, whenever any sum is entered in a depositor's pass-book by a proper agent, the company is responsible for the principal and interest. This in-

terest is four per cent. and is generally greater, and always equaling, that given by other savings banks. No difficulty whatever is experienced in withdrawing money, as checks can be drawn through the same sources that the money is deposited. Depositors participate in all the profits earned by the operations of the savings fund, being substantially stockholders, without the liabilities or any legal responsibilities usually attached thereto.

The building feature, which is connected with the savings fund, and through which the moneys of the fund are invested, affords those in the employ of the company opportunities to provide or improve homesteads for their families in the simplest manner possible. This money is loaned at the uniform rate of six per cent., and upon the easiest terms of repayment. The amount borrowed is repaid at the rate of one and one-half per cent. monthly, and the borrower is credited with every cent paid on the principal, thus reducing his principal and interest each month. Through the employment of company's attorneys, resident in accessible localities upon the lines, valid titles are secured at the minimum cost. The payment of rent is saved—in most cases the monthly repayments being usually less than what they would pay as rent. Material is obtained at large reductions by reason of the facilities possessed by the company for purchasing at less prices than the individual. Reduced transportation is furnished for all material entering into the construction or improvement of homesteads. No objection whatever has been found with the savings bank or building feature, the only difficulty being that applications for loans are largely in excess of the ability of the bank to meet.

The savings fund and building feature were established on August 1st, 1882, and since that time deposits have reached the sum of \$1,237,-336.79, all of which, with the exception of that withdrawn and what is regarded as a prudent balance to meet the demands of depositors, has been invested in securing homes for employés.

The amount loaned to employés has been expended in the erection of 379 new houses; buying 365 houses already built; improving 87 houses owned by employés, and releasing liens on the homes of 201 others.

#### REGULATIONS.

##### *General.*

1. A Department of the Company's service is hereby established, to be known as the "Relief Department."

Whenever the following words and titles occur in these Regulations they will, unless otherwise specified, have the meaning herein defined:

"Company" will mean the Baltimore & Ohio Railroad Company.

"Department" will mean Relief Department.

"Committee" will mean the Committee of the President and Directors of the Company "on the Relief Department."

"Superintendent" will mean the Superintendent of the Relief Department. "Service" will mean employment by the Baltimore & Ohio Railroad Company or other corporation whose employes may participate in the privileges of the Relief Department.

2. The Company assumes general charge of the Department; furnishes, office-room and furniture; gives the services of its officers and employes and the use of its facilities; becomes the custodian of its funds with full responsibility therefor, and guarantees the true and faithful performance of the obligations of the Department in conformity with the regulations hereby established.

3. The Relief Department will be divided into three (3) sections to be known as the Relief, Savings and Pension Features, the accounts of which shall be kept separate.

The Relief Feature will afford relief to its members entitled thereto, when they are disabled by injury or sickness, and to their families in the event of their death.

The Savings Feature will afford opportunity to employes and their near relatives to deposit their savings and earn interest thereon, and enable employes only to borrow money at moderate rates of interest and on easy terms of prepayment, for the purpose of acquiring or improving a homestead, or freeing it from debt.

The Pension Feature will make provision for those employes, who by reason of age or infirmity are relieved or retire from the service of the Company.

4. The Company will contribute to the Department the following amounts: \$6,000 annually for the support of the Relief Feature, or when not needed for that Feature, for the support of the Pension Feature.

\$25,000 annually for the support of the Pension Feature.

\$2,500 annually for the physical examination of employes.

5. The Committee will have charge of the operations of the Department, and make any changes in these Regulations which they may deem necessary. New regulations will be operative only when approved by the President and Directors of the Company, and will then be binding upon the Company, and the members of this Department, who will be notified of the adoption of the same by publication thereof on the next monthly statement of benefits paid. The Committee will determine, on appeal from the Superintendent of the Relief Department, the rights of any member of the Relief Feature, depositor or borrower of the Savings Feature or Pensioner, in reference to any claim made by such person and not allowed by the Superintendent, and their decision shall be final and conclusive. They will directly, or through a sub-committee of two or more of their members, pass upon applications for loans from the Savings Feature. They will report annually to the President and Directors the condition of the Department, and will cause to be issued and posted in all shops and stations a monthly statement of benefits paid. They will also determine what disposition shall be made of the surplus funds of the Relief Feature at the close of each fiscal year; whether to decrease the next year's contributions; to increase the amount payable for natural death; to increase the efficiency of the Pension Feature, or otherwise promote the interest of those contributing thereto. They will direct all the investments for the several Features of the Department.

6. The President will, subject to the approval of the President and Directors, appoint a Superintendent, an Assistant Superintendent, an Actuary



and a Chief Clerk of the Relief Department, and will fix the compensation of each.

The Superintendent will be the executive officer in charge of the Department, and will report directly to the President and act as Secretary of the Committee. He shall have power to employ his subordinates and prescribe their duties, and employ and direct all contract and local surgeons and Medical Examiners, and generally to conduct the business of the Department, subject to the approval and control of the President. All orders or instructions relating to the business of the Department will be issued by or through him.

The Superintendent will also, through the Medical Examiners, ascertain and report to the President the sanitary condition of shops, stations, yards and other portions of the Company's property and the surroundings of its employés, and likewise all facts affecting the comfort, safety and welfare of the employés and passengers.

The Superintendent will be assisted by an Assistant Superintendent, who shall perform all the duties of the Superintendent in his absence, and such others as may from time to time be assigned him by the Superintendent.

The Chief Clerk shall have special charge of the receipts and disbursements of the Department, and accounts connected therewith.

All checks or orders for the payment of moneys shall be signed by the Superintendent, or the Assistant Superintendent in the absence or incapacity of the Superintendent, and be countersigned by the Chief Clerk.

7. The fiscal year of the Department will begin with the first day of October of each year.

8. Other corporations associated in interest with this Company, or having harmonious relations therewith, may secure to themselves and their employés the advantages offered by this Department by agreement between the respective companies, but only so as to always protect the employés of of this Company from any additional burdens by reason of the admission of the employés of such other company.

9. All moneys and securities of the Department, with the exception of the mortgages made to secure loans from the Savings Feature, shall be entrusted to the official custody of the Treasurer of the Company, to be held subject to proper requisitions. All such securities will be held in the name of the Company "in trust for the Relief Department."

Interest at the rate of four per cent. per annum will be paid on the monthly balances of cash deposited with the Treasurer for the several Features of this Department, including in such balances the amount of checks not presented for payment or unclaimed on the last day of the month.

10. The officers, agents and employés of the Company shall coöperate with the Department in promoting its objects, and, as a part of their duties, conform to these Regulations.

In indicating the relations to the service of employés relieved of employment and pay therein, the following terms shall be used:

"Resigned" for those voluntarily leaving the service.

"Discharged" for those permanently relieved for cause.

"Furloughed" for those temporarily relieved without fault on their part.

"Suspended" for those temporarily relieved as a penalty for slight offences.

11. All claims of members of the Relief Feature, their beneficiaries or other representatives, or of depositors or borrowers of the Savings Feature, or of



Pensioners, arising under these Regulations, and all questions or controversies of whatsoever character arising in any manner, or between any parties or persons, in connection with the Relief Department or the operation thereof, whether as to the construction of language or meaning of the Regulations, or as to any writing, decision, instruction or acts in connection therewith, shall be submitted to the determination of the Superintendent of the Relief Department, whose decision shall be final and conclusive thereof, subject to the right of appeal in writing to the Committee directly or through the Advisory Committee within thirty days after notice to the parties interested of the decision.

When an appeal is taken to the Committee, it shall be heard by them without further notice at their next stated meeting, or at such future meeting or time as they may designate, and shall be determined by vote of the majority of a quorum, or of any other number not less than a quorum of the members present, and the decision arrived at thereon by the Committee shall be final and conclusive upon all parties, without exception or appeal.

12. There shall be two Advisory Committees, one for the lines and divisions east of the Ohio River, and one for the lines and divisions west of the Ohio River.

Each Committee shall consist of seven members, including the Chairman. The General Manager east of the Ohio River shall be, *ex-officio*, Chairman of one, and the General Manager west of the Ohio River shall be, *ex-officio*, Chairman of the other. The other members of each Committee shall be elected annually by the members of the Relief Feature employed on the several lines or divisions east and west of the Ohio River respectively from among themselves—two by the vote of the members employed in the Machinery Department, two by the vote of those employed in the Transportation Department, and two by the vote of those employed in the Road Department.

The election shall be by ballot, each member being entitled to one vote for the representative or representatives of the Department in which he is employed. The ballots shall be returned to the General Manager, and by him forwarded to the Superintendent of the Relief Department, to be counted by tellers appointed by the Committee on the Relief Department. The Tellers shall ascertain and decide that the person casting each ballot is a member of the Relief Feature entitled to cast the same. The result ascertained by the Tellers shall be reported by the Superintendent to the General Managers, who shall notify the members elected.

The first election shall be held during the month of April, 1889, and the members then elected shall constitute the respective Committees from the date of their election until the first day of October, 1889. On the first Monday of September in each year, beginning with the year 1889, the members of said respective Committee shall, in like manner, be elected for the year beginning the first day of October following. Each Committee shall have power to fill vacancies in its number arising from any cause, provided that the representation of the three Departments named shall always be equal, and shall select its Secretary out of its own number.

Any member of the Relief Feature or Pensioner who feels aggrieved by any decision or order of the Superintendent, or by the application to his case of any of the regulations of the Department, may within thirty (30) days make his complaint in writing to the Advisory Committee for the territory in which he is employed.

The Advisory Committee shall receive such complaint, examine into and pass upon the same; and if they deem the same to be well founded, shall report the matter fully in writing to the Committee on the Relief Department, with their recommendation in the premises. The Committee shall dispose of the matter so appealed to them in the manner provided in Regulation No. 11 with reference to appeals.

The Advisory Committee will also, from time to time, make to the Committee such recommendations in reference to the business of the Department as they may deem advisable, and will examine into and report on all matters referred to them by the Committee. Each Advisory Committee shall hold regular meetings every three months. Special meetings may be called at any time by the Chairman.

#### RELIEF FEATURE.

##### *Membership.*

13. The word "member" in the following Regulations will mean any person entitled to participate in any of the forms of relief afforded by the Relief Feature.

14. Membership in this feature will be voluntary to the following classes:

- (a) Officials receiving an annual compensation of over \$2,000.
- (b) Employés who entered the service prior to May 1, 1880, and who have been continuously therein since that date; except members of the Baltimore and Ohio Employés Relief Association.
- (c) Clerks, telegraphers and others of similar employment who are in no degree exposed to accidents in the service.
- (d) Agents receiving commissions only and employés receiving \$20 per month or less.

All of these persons may acquire membership in either the natural death or sick benefit, or both, upon compliance with the conditions thereto attaching. Having once become members, they must continue so while in the service.

All persons employed in the service, on the first day of April, 1889, with the exceptions noted above, and all persons thereafter entering the service or promoted therein, must, as a condition of employment or advancement, become full members of this Feature, entitled to all its benefits, before being permitted to go on duty.

The above regulations apply to all classes of employés, whether denominated regular, extra, temporary or construction force, and to those on probation or learning their duties, although not then receiving pay from the Company.

The only exceptions to this rule will be in cases of great emergency, when the services of the persons are absolutely necessary on short notice. In such cases men may be allowed to work not more than two (2) days without becoming members.

No person over 45 years of age, or who is not in good physical health—to be determined and certified by a Medical Examiner of this Department, will be admitted to membership, except those who were members of the Baltimore and Ohio Employés Relief Association on the 31st day of March, 1889. This requirement is absolute, and exceptions will be made only by the President in writing, a copy of which will be filed in the Relief Department.

15. To entitle an employé to participate in any of the forms of relief

afforded by the Relief Feature, he must execute an application in one of the forms prescribed in Regulation 17, and pass a satisfactory medical examination. This application, when accepted by the Superintendent, will constitute a contract of employment between the applicant and the Company, binding each to be governed by the terms of the application and these Regulations. The evidence of the acceptance and approval of the application will be the issuance to the applicant of a certificate of membership, containing a copy of the application and the Regulations of the Relief Department then in force.

Duplicate certificates will be issued only upon the payment of twenty-five (25) cents.

16. Immediately upon the employment of any person for the service, who is under these Regulations required to become a member of the Relief Feature, notice in writing of such employment must be sent to the Superintendent of the Relief Department, and to the Medical Examiner of the district in which the person is employed. The latter will, as soon thereafter as possible, make the necessary examination, advise the applicant and the employing official of the result, and, if it is favorable, complete and forward the application. If unfavorable, the application will be forwarded to the Superintendent of the Relief Department, showing fully the cause of rejection. In such case the employé will immediately be relieved from the service.

17. Applications for full membership will be substantially in the following form:

APPLICATION FOR FULL MEMBERSHIP IN THE RELIEF FEATURE.

*To the Superintendent of the Relief Department:*

I . . . of . . . in the County of . . . and State of . . . desiring to be employed in the service of the Baltimore and Ohio Railroad Company as . . . in the . . . Department, . . . Division, do hereby, as one of the conditions of such employment, apply for membership in the Relief Feature, and consent and agree to be bound by all the Regulations of the Relief Department, now in force and by any other Regulations of said Department, hereafter adopted, applicable to the Relief Feature; for which Regulations now in force reference is hereby had to any copy of the last edition of the book of Regulations of said Department issued by the Superintendent.

I also agree that the said Company by its proper agents and in the manner provided in said Regulations, shall apply monthly in advance from the first wages earned by me under said employment, in each calendar month, sums at the rate of . . . per month as a contribution to the Relief Feature of said Department, for the purpose of securing the benefits provided by said Regulations for a member of Class . . . to myself, or in the event of my death, to . . . or to whomever I may hereafter from time to time designate in writing by way of substitution, with the written consent of the Superintendent; or if no such beneficiary be then living, to my next of kin (as determined by the laws of the State of Maryland) in accordance with Regulation No. 18, subject to all the provisions and requirements of said Regulations.

\*I expressly stipulate that my marriage shall *ipso facto* have the effect to substitute my wife in the place and stead of the beneficiary named above to receive said benefits in the event of my death, if she be then living.

\*The Medical Examiner will in the cases of applicants already married, erase this paragraph.



I further agree that this application when accepted by the Superintendent shall constitute a contract between myself and the said Company as a condition of my employment by the Company, governed in its construction and effect by the laws of the State of Maryland, and as such be an irrevocable power and authority to said Company to appropriate the above amounts from my wages and apply the same as aforesaid, and shall constitute an appropriation and assignment in advance to the said Company in trust for the purposes of the Relief Feature of such portions of my wages, which assignment shall have precedence over any other assignment by me of my wages or of any claim upon them on account of liabilities incurred by me.

I further agree that in consideration of the contributions of said Company to the Relief Department and of the guarantee by it of the payment of the benefits aforesaid, the acceptance of benefits from the said Relief Feature for injury or death shall operate as a release of all claims against said Company or any company operating its branches or divisions for damages by reason of such injury or death, which could be made by or through me; and that the Superintendent may require as a condition precedent to the payment of such benefits that all acts by him deemed appropriate or necessary to effect the full release and discharge of said companies from all such claims, be done by those who might bring suit for damages by reason of such injury or death; and also that the bringing of such a suit by me, my beneficiary or legal representative or for the use of my beneficiary alone or with others or the payment by any of the companies aforesaid of damages for such injury or death recovered in any suit or determined by compromise, or any costs incurred therein shall operate as a release in full to the Relief Department of all claims by reason of my membership therein.

I also agree for myself and those claiming through me, to be specially bound by Regulation No. 11, providing for the final and conclusive settlement of all disputes by reference to the Superintendent of the Relief Department; and an appeal from his decision to the Committee on the Relief Department.

I understand and agree that this application when accepted by the Superintendent, shall constitute a contract between me and the said Company, by which my rights as a member of said Relief Feature and as an employé of said Company shall be determined as to all matters within its scope; that each of the statements herein contained and each of my answers to the questions asked by the Medical Examiner and hereto annexed shall constitute a warrant by me, the truth whereof shall be a condition of payment of any of the benefits aforesaid.

I hereby certify that I am . . . years of age, am correct and temperate in my habits and have no injury or disease, constitutional or other, which will tend to shorten my life; am now in good health and able to earn a livelihood. In witness whereof, I have signed these presents at . . . in the State of . . . , this . . . day of . . . , 18 . . .

Witness: \_\_\_\_\_

The foregoing application is accepted at the office of the Superintendent of the Relief Department in Baltimore City, Maryland, this . . . day of . . . , 18 . . .

*Superintendent of the Relief Department.*

Applications for additional natural death benefit or for natural death benefit only will be substantially in the following form:



## APPLICATION FOR NATURAL DEATH BENEFIT.

*To the Superintendent of the Relief Department :*

I, . . . of, . . . in the County of . . . , State of . . . , employed in the service of the Baltimore and Ohio Railroad Company, as . . . in the . . . Department Division, do hereby, by virtue of such employment, apply for membership in the Relief Feature for the natural death benefit only, and consent and agree to be bound by all the Regulations of the Relief Department now in force and by any other Regulation of said Department hereafter adopted, applicable to the Relief Feature; for which Regulations now in force reference is hereby had to any copy of the last edition of the book of Regulations of said Department issued by the Superintendent.

I also agree that the said Company by its proper agents and in the manner provided in said Regulations shall apply monthly in advance from the first wages earned by me under said employment, in each calendar month, sums at the rate of . . . per month as a contribution to the Relief Feature of said Department (in addition to any amounts I may have heretofore authorized said Company to so apply) for the purpose of securing . . . times the natural death benefit of the lowest class provided by said Regulations, in the event of my death to . . . , or whomever I may hereafter from time to time designate in writing by way of substitution, with the written consent of the Superintendent; or if no such beneficiary be then living, to my next of kin (as determined by the laws of the State of Maryland) in accordance with Regulation No. 18: subject to all the provisions and requirements of said Regulations.

\*I expressly stipulate that my marriage shall *ipso facto* have the effect to substitute my wife in the place and stead of the beneficiary named above to receive said benefits, in the event of my death, if she be then living.

I further agree that this application when accepted by the Superintendent shall constitute a contract between myself and the said Company, governed in its construction and effect by the laws of the State of Maryland, and as such be an irrevocable power and authority to said Company to appropriate the above amounts from my wages and apply the same as aforesaid, and shall constitute an appropriation and assignment in advance to the said Company in trust for the purposes of the Relief Feature, of such portions of my wages, which assignment shall have precedence over any other assignment by me of my wages or of any claim upon them on account of liabilities incurred by me.

I also agree for myself and those claiming through me, to be specially bound by Regulation No. 11, providing for the final and conclusive settlement of all disputes by reference to the Superintendent of the Relief Department, and an appeal from his decision to the Committee on the Relief Department; and also by Regulation No. 35 providing for loss of all rights hereunder by failure to contribute as therein provided.

I understand and agree that this application when accepted by the Superintendent, shall constitute a contract between me and the said Company, by which my rights as a member of said Relief Feature and as an employé of said Company shall be determined as to all matters within its scope; that each of the statements herein contained and each of my answers to the questions asked by the Medical Examiner and hereto annexed shall constitute

\*The Medical Examiner will in the cases of applicants already married, erase this paragraph.

a warranty by me, the truth whereof shall be a condition of payment of the benefits aforesaid.

I hereby certify that I am . . . . . years of age, am correct and temperate in my habits and have no injury or disease, constitutional or other, which will tend to shorten my life; am now in good health and able to earn a livelihood. In witness whereof, I have signed these presents at . . . . in the State of . . . . , this . . . . . day of . . . . , 18—.

Witness: \_\_\_\_\_.

The foregoing application is accepted at the office of the Superintendent of the Relief Department in Baltimore City, Maryland, this . . . . . day of . . . . , 18—.

\_\_\_\_\_,  
*Superintendent of the Relief Department.*

Applications when accepted, will take effect from the date of execution, or from any subsequent date upon which the applicant actually begins work.

18. The beneficiary or beneficiaries named in any application for full membership, if the applicant be married, must be his wife or his wife and children. If he be single, the beneficiaries must be his father and mother or the survivor. No application will be accepted which does not comply with these requirements, unless the Superintendent waive the same, for reasons satisfactory to him. No one shall be entitled as the beneficiary of a member who is not the widow or a relation not more remote than a first cousin, except in case of the assignment to the Superintendent of the natural death benefit to secure a loan from the Savings Feature or in case of the taking of special natural death benefit for that purpose.

19. Membership in the natural death benefit only may be maintained during furlough or suspension by making the contributions required therefor and otherwise complying with these Regulations.

20. Furloughed or suspended members who are restored to duty within six (6) months, from the date of such furlough or suspension, may be restored to full membership without reference to the requirements governing the admission of new members. If restored to duty after six (6) months, it will be on the same conditions as new employés.

21. Persons who have once become members must continue so while in the service. Whenever a member ceases to be employed in the service, his membership will, *ipso facto*, terminate from that date (except in the cases hereinafter provided for), unless he shall within ten (10) days thereafter sign and deliver to his employing official for transmission to the Superintendent of this Department, an application in the second form shown in Regulation No. 17, to retain his natural death benefit only. Every such member shall on reëntering the service be subject to the regulations governing new employés.

A member who at the time his employment ceases is disabled by injury or sickness will continue to receive the benefits therefor during the period provided in these Regulations, and during such period will retain the death benefit covered by his application. After the expiration of said period he may retain his natural death benefit only, by making application as above provided within ten days from the date of the last payment of benefits on account of such injury or sickness; otherwise his membership will wholly cease from that date.

Contributions.

22. The word "contribution" wherever used in these Regulations refers to the sums paid into the Treasury of the Company on account of the Relief Feature either by appropriation of wages earned or by deposits of cash, for or by members.

23. Members will be divided into two general classes, viz:  
1st Class. Those engaged in operating trains or rolling stock.  
2d Class. Those not so engaged.

These will be further divided according to their average monthly pay, as follows:

- A. Those receiving not more than thirty-five dollars (\$35.00).  
B. Those receiving more than thirty-five (35) and not more than fifty dollars (\$50.00).  
C. Those receiving more than fifty (50) and not more than seventy-five dollars (\$75.00).  
D. Those receiving more than seventy-five (75) and not more than one hundred dollars (\$100.00).  
E. Those receiving more than one hundred dollars (\$100.00).

24. The contributions for these classes shall be made each calendar month in advance at the following rates:

	A.	B.	C.	D.	E.
First class: Per month. . . . .	\$1 00	\$2 00	\$3 00	\$4 00	\$5 00
Second class: Per month. . . . .	75	1 50	2 25	3 00	3 75

25. The contribution for the natural death benefit only shall be at the rate of twenty-five (25) cents per month for each such benefit of the lowest class.

26. The class to which a member is to be assigned will be ascertained by multiplying his average daily wages by twenty-six (26), the average number of working days in a month.

Cases of doubtful classification, either as to hazard of occupation or contributions to be made, will be decided by the Superintendent of the Relief Department.

When a member's pay is increased beyond the limit of the class in which he contributes, he will enter the correspondingly higher class. He may enter a correspondingly lower class if his pay is reduced. In either case he must make a new application, without medical examination, to correspond with the change. Change of occupation, involving change from first to second class, or *vice versa*, will require new application and change of rate of contribution.

27. The amount to be contributed or returned for a part of a month will be ascertained on the basis of thirty (30) days per month, adding to make even cents where fractions occur.

28. Contributions will be due on the first day of each calendar month and will ordinarily be made by the appropriation of wages earned in the preceding month. The first contribution will be for the unexpired part of the month in which the application takes effect and for the whole of the next month.

29. The contribution of a member who enters and leaves the service in the same month, will be only for the period between the date his application takes effect and that on which he leaves the service, both inclusive.



30. A member who earns no wages in any month from any reason other than injury or sickness entitling to benefits, must contribute from the first wages earned in the month in which he resumes work for the unexpired portion of that month and for the whole of the next month. If a member fail to earn wages by reason of injury or sickness entitling to benefits, he will be entitled to the benefits covered by his application for the month in which he resumes work, without contribution for that month.

31. No portion of the contribution of a member for the month in which he dies will be returned but contributions for subsequent months will be.

32. No contribution need be made by a disabled member for the time for which he receives benefits, subsequent to the next month after that in which the disability begins.

33. No appropriation is to be made from the final payment of wages to a member leaving the service, except for contributions in arrears. If he leaves the service before the expiration of the time for which he has contributed, the unearned portion of such contribution will be returned to him.

34. Contributions other than those made by appropriation of wages must be made by deposits with the Treasurer or some bonded agent of the Company, notice of such deposit being forwarded to the Superintendent by the member.

35. If a member who is furloughed or suspended or has left the service, but who retains the natural death benefit, fails to make his monthly contribution by deposit as aforesaid and forward the notice to the Superintendent, on or before the last day of the calendar month next following that for which his last previous contribution was made, he shall *ipso facto* and without further notice or other action by the Department lose all rights of membership therein and cease to have any claim to receive benefits therefrom.

#### *Notice of Disablement.*

36. A member disabled by injury or sickness must immediately notify the official designated by the General Manager to receive reports of disablement

A member must always give his proper address when reporting himself disabled, and report any change therein. His disablement will be taken to begin with the date of such report; and a member failing to make such report during his disablement will receive no benefits.

37. Officials designated as aforesaid to receive reports of disablement will immediately notify the Superintendent of the Relief Department and the Medical Examiner in whose district the member is to be found. Any official who, through negligence or other cause within his control, delays or fails to send such notices, will be required to make good to the member any loss he or she may thereby sustain. Notice of death must be forwarded promptly by the official under whom the deceased was employed. In case of death from injury, all the particulars, so far as known, must be given.

38. The employing official must promptly report the return of the member to duty, to the Medical Examiner having charge of the case.

*Provided, however,* that under an application for sick benefit only a member shall be entitled to receive benefits as provided in these regulations, even though his disablement be caused by accidental injury as above defined, and that under an application for natural death benefit only the natural death benefit provided by these regulation shall be payable, although the death be caused by accidental injury as above defined. This proviso shall apply to the natural death benefits held by a member in addition to his full membership, so far as such additional benefits are concerned.



*Benefits.*

39. Wherever used in these Regulations the word "benefits" will be understood to mean the sums of money which may become payable under these Regulations; the phrase "accidental injuries" to mean only bodily injuries directly produced by external violence, excluding sunstroke and frostbite; "accident benefit" to mean the right of a member to receive benefits under these Regulations in case he is disabled by "accidental injuries"; "sick benefit" to mean the right of a member to receive benefits, under these Regulations, in case he is disabled by sickness or causes other than accidental injuries covered by the accident benefit; "accidental death benefit" to mean the right of a member, under these Regulations, to designate certain beneficiaries to whom benefits shall be paid in case of his death from accidental injuries; "natural death benefit" to mean the right of a member, under these Regulations, to designate certain beneficiaries to whom benefits shall be paid in case of his death from causes not covered by the accidental death benefit; "natural causes" to mean causes other than accidental injuries received in the discharge of duty in the service.

40. The fund from which these benefits are to be paid will be formed by the contributions of members and the Company, the income or profits derived from investment of the funds of the Relief Feature, and such gifts, legacies, &c., as may be made to the Company for the use and benefit of the Relief Feature.

41. Members will be entitled to benefits upon the conditions prescribed in these Regulations, as follows:

*First.* Payments while totally disabled by accidental injury received in the discharge of duty in the service, for each day other than Sundays and legal holidays, during a period not exceeding twenty-six (26) weeks, at the rate of fifty (50) cents per day for a member of the lowest class, and at higher rates for members of the other classes in proportion to their contributions; and at half these rates during the continuance of the disability after the first twenty-six (26) weeks.

*Second.* Payments while totally disabled by sickness, or from any cause other than accidental injuries received in the discharge of duty in the service, for each day other than Sundays and legal holidays, after the first six working days of such disability, and for a period not exceeding fifty-two (52) weeks, at the rate of fifty (50) cents per day for a member of the lowest class, and at higher rates for members of the other classes in proportion to their contributions.

*Third.* Payment, on the death of a member of the lowest class from accidental injuries received in the discharge of his duty in the service, of five hundred dollars (\$500), and of greater amounts for the other classes in proportion to their contributions.

*Fourth.* Payment, on the death of a member of the lowest class from any cause other than accidental injuries received in the discharge of duty in the service, of two hundred and fifty dollars (\$250), and of greater amounts for the other classes in proportion to their contributions.

*Fifth.* Payment of fees for such surgical attendance as the Medical Examiner shall approve as necessary in consequence of accidental injuries received in the discharge of duty in the service, at the rates fixed in the schedule adopted by the Department, when the bills therefor are approved by the local Medical Examiner. The Superintendent will arrange for the admission of members to hospitals, at moderate cost, when requested.

42. The following table shows in brief the contributions and the benefits of the several classes:

	A.	B.	C.	D.	E.
Rates of contribution per month—					
First class, . . . . .	\$1 00	\$2 00	\$3 00	\$4 00	\$5 00
Second class, . . . . .	75	1 50	2 25	3 00	3 75
Entitling to benefits—					
For accidental injuries per day, not including Sundays and legal holidays—					
First 26 weeks, . . . . .	50	1 00	1 50	2 00	2 50
After 26 weeks, . . . . .	25	50	75	1 00	1 25
For sickness per day, not including first six working days, Sundays or legal holidays, for 52 weeks, . .	50	1 00	1 50	2 00	2 50
In the event of death from—					
Accidental injuries, . . . . .	500 00	1,000 00	1,500 00	2,000 00	2,500 00
Natural causes, . . . . .	250 00	500 00	750 00	1,000 00	1,250 00

43. Any member under fifty (50) years of age who can pass a satisfactory medical examination may enter a higher class than that to which his pay assigns him, or may take additional natural death benefits, provided his total natural death benefit shall not exceed thirty times the natural death benefit of a member of the lowest class.

44. If a member recover from the effects of accidental injury received in the discharge of duty so that in the opinion of the Medical Examiner he is no longer disabled thereby, but continue disabled from sickness or debility, he will be entitled to benefits not longer than 52 weeks from the date of such injury, and at the rate payable for sickness.

45. If a member returns to duty after receiving benefits for sickness for less than twelve weeks, and is again disabled by sickness within two weeks thereafter, the two disablements may, at the option of the Superintendent, be treated as one in computing the fifty-two weeks for which benefits may be paid; and, if so treated, the deduction of six working days will be made only from the first disablement. A member who returns to duty after being disabled by sickness for twelve weeks or longer, will be entitled to receive benefits for sickness only after he has been continuously engaged in the performance of duty for four weeks.

46. No benefits will be paid on account of injury, sickness or death, occurring at any place outside of the United States, or where epidemic diseases of a dangerous character are likely to prevail, and to which his duties as an employé of the Company do not call him, and contributions will be returned which cover any time subsequent to the date at which a member, though on furlough, may go to such places. Exceptions to this rule can be made only by the Superintendant upon a full statement of the facts.

47. Benefits will not be paid for injury or sickness which is in any way caused or increased in whole or in part, by intoxication, the use of intoxicating liquors, sexual immorality, breach of the peace, or other violation of the law on the part of the member; or for death by the hands of justice.

48. A member will not be entitled to any benefits for time for which he receives wages from the Company.

49. No claim for benefits under any of these Regulations shall be payable or paid, until there be first filed with the Superintendent satisfactory proof, in such form as he may require, of the validity of such claim. Benefits will be paid only for the period of actual disability as certified by the Medical Examiner.

50. The Superintendent will provide for the visitation of members reported disabled by injury or sickness, and those who decline to submit to such visits or examinations, or who absent themselves from their usual places



of residence, or are in places so distant that the Medical Examiner cannot be expected to visit them, will not be entitled to benefits.

51. Benefits on account of accidental injury will be paid only when shown by evidence satisfactory to the Superintendent to have been received by the member while actually engaged in the performance of duty in the service to which he was assigned, or in voluntarily protecting the Company's property. In all cases there must be external or other positive evidence of injury, and the person claiming benefits must produce proof satisfactory to the Superintendent that the disablement is the direct results of accidental injury received as aforesaid, and renders the member totally unable to labor, or, when of a permanent character, to earn a livelihood in any employment. In case of death, it must be shown to have occurred solely by reason of, and within twenty-six (26) weeks after an accidental injury received as aforesaid, and the benefits payable, in the event of such death, shall in no case exceed the amount payable under the accident death benefit of the class to which the member belonged by virtue of his accepted application at the time of his death. Death after the twenty-six (26) weeks above limited will be treated as death from natural causes. The results of injuries received otherwise than in the performance of duty as aforesaid, will be treated as sickness or death from natural causes.

52. In the event of disability or death from accidental injuries, the benefits herein promised shall not be payable or paid until there be first filed with the Superintendent of the Relief Department releases satisfactory to him, releasing the Company, and all other companies operating its branches or divisions, or whose employes are admitted to the privileges of this Department, from all claims for damages by reason of such injury or death, signed by all persons who might bring suit for such damages, or those legally competent to release for them, and by the beneficiaries named in the respective applications.

53. Should suit be brought by a member, his beneficiary or his legal representative, or for the use of his beneficiary alone, or with others, against the Company or any company operating its branches or divisions, or whose employes are admitted to the privileges of this Department, for damages on account of injury or death of such member, no benefits on account of such injury or death shall be paid, but all claims to such benefits, under these Regulations shall be forfeited, unless such suit be discontinued and all costs incurred by the defendant therein paid by the plaintiff before any hearing or trial on demurrer or otherwise. Should such a suit for damages on account of the death of a member be brought by any person claiming an interest other than those named above, the existence of such suit shall prevent the payment of benefits on account of such death, and any payment by any of the companies above mentioned of damages recovered in such suit, or determined by compromise, or of any costs incurred therein, shall operate as a release in full of all claims against this Department.

54. No claim for benefits of any kind under these Regulations shall be made, or if made, be accepted and paid, unless it be presented with the proofs required by these Regulations within one year from the date of the death, injury or sickness on which the claim is based. Benefits unclaimed, or the right to which is in dispute, will not bear interest. Benefits allowed, but remaining unclaimed for three years from the date of the allowance thereof, will lapse, and will not be payable thereafter.

55. A new member whose application has been accepted will be entitled to all the benefits covered thereby from the date he actually begins work.

If an employé receives accidental injuries in the discharge of his duty in the service after making application for full membership and passing an examination satisfactory to the Medical Examiner, but before his application is accepted by the Superintendent, he will be entitled to the accident benefit and the accidental death benefit, his contribution being made from wages earned or benefits payable.

56. A member who is absent from duty beyond the month for which the last regular contribution from his wages was made, or who has earned no wages within that month, will be entitled to no benefits after that month, except in the cases specially provided for in these Regulations.

57. All rights to receive benefits shall cease from the date a member ceases to be employed in the service, except in the cases provided for in Regulation No. 21.

58. The benefits on account of the death of a member will be paid to the beneficiary designated in the application. If none such be living, the benefits shall lapse and remain for the benefit of all the other members. The Superintendent may, in such a case, defray the expenses of the member's funeral so far as he deems proper.

59. The benefits on account of injury or sickness will be paid only to the member entitled thereto. If the member becomes insane or otherwise incapacitated to act, the benefits may, in the absence of a legally appointed guardian, be applied to meet the wants of the member or his family directly, or by payment to his wife or near relative. All benefits unpaid at the time of a member's death will be paid to the person entitled to receive the death benefit.

60. No assignment of benefits or change of beneficiary will be permitted without the written consent of the Superintendent, nor shall benefits be subject to attachment or other legal process. If any attachment or other legal process is served upon the Superintendent or the Company, all benefits due or to become due to such member shall lapse and remain in the funds of the Department, subject to the order of the Committee.

Benefits and all other claims against the Relief Department will be paid monthly by checks signed by the Superintendent.

For claims originating on the Main Stem and branches, including the Philadelphia Division, received at the Superintendent's office in proper form for settlement on or before the 10th day of each month, checks will be issued on the 20th of that month, or on the 21st if the 20th be Sunday or a legal holiday. For claims originating on the Trans-Ohio or Pittsburgh Divisions, received at the Superintendent's office in proper form for settlement on or before the 1st day of each month, checks will be issued on the 10th of that month, or on the 11th if the 10th be Sunday or a legal holiday.

62. Checks issued by the Superintendent of the Relief Department will be cashed by the Treasurer or any bonded Agent or Cashier of the Company having Company's funds in his possession, and such checks may be used as cash or vouchers in settlement with the Accounting Department. For contributions refunded receipts must be taken on the prescribed form and sent to the Superintendent of the Relief Department, who will issue checks in favor of the official paying them.

Each member will be notified in whose care his check is sent. Officials receiving checks will be held responsible for their prompt and safe delivery to their owners. No duplicate check will be issued within sixty (60) days from the date of the original, and no original check presented for payment *after* sixty (60) days from its date must be paid until it has been certified on



its face by the Superintendent of the Relief Department that no duplicate has been issued.

63. Death claims will be paid within sixty (60) days after satisfactory proof of death is furnished. In urgent cases the Superintendent is authorized to advance a portion of the death benefit.

#### *Miscellaneous.*

64. Members of the Relief Feature in the service of the Company, their wives and children, fathers, mothers, brothers or sisters wholly dependent upon them for support, will be entitled to travel over all the lines of the Baltimore and Ohio Railroad Company at one-half the rates charged the public for the transportation only. The children of such members, under sixteen years of age, shall travel free over all lines when going to or returning from daily school. Furloughed or suspended members, and Pensioners, who retain their natural death benefit, will be entitled to the same privileges.

65. In reductions of force, temporary or permanent, preference as to retention in the service will be given to members of the Relief Feature and depositors or borrowers of the Savings Feature, other things being equal, over those in the same grades of service not connected with the Relief Department.

66. When a member ceases to be employed in the service, the cause must be noted on the pay-roll on which the last payment to him is made. When a member fails to earn wages in any calendar month, by reason of sickness or injury, his name will be carried on that and future pay-rolls, and the cause for not earning wages noted opposite his name. The numbers of the certificates of membership must also be entered opposite members' names on the pay-rolls.

67. All members injured in the service of the Company, and in the discharge of their duty, to such a degree as to incapacitate them from earning a livelihood at their usual occupations, should be provided, so far as possible, with such positions in the service as they can efficiently fill.

68. As to all members of the Baltimore and Ohio Employés Relief Association on the 31st day of March, 1889, all of these Regulations shall be so interpreted and applied that each such member may acquire membership in the Relief Feature of this Department in the class, and with the same number of additional natural death benefits, to which he would have belonged, if his application or applications made in the Relief Feature of said Association, and then in force had been made and accepted under these Regulations; provided that he execute within the time fixed by the order of the President a proper application in one of the forms prescribed in these Regulations, but containing an additional clause by which such member shall assign and make over to the Company all his right, title and interest in or to the assets of the Relief and Pension Features of said Association, and shall assent to the transfer of said assets by said Association, to the Company for the purposes of the like Features of this Department respectively.

#### SAVINGS FEATURE.

##### *Depositors.*

69. Any employé of the Company, his wife, child, father or mother or the beneficiary of any deceased member of the Relief Feature may deposit with any depository designated by the Company, any sum not less than one dol-

lar, nor more than one hundred dollars in any one day unless otherwise specially authorized by the Superintendent.

70. Parents or others may deposit in the name of any child, such deposit being subject to the order of the parent or other adult; and a minor may deposit in his own name, subject however, to the order of an adult.

71. Any person entitled under these Regulations who wishes to become a depositor, shall execute an application, in which there shall be set forth the applicant's full name, residence and occupation, and the name and residence of the person to whom, in the event of death, his or her deposits and the profits accrued thereon shall be paid; when executed he shall forward it to the Superintendent.

72. If the application be accepted a pass-book will be issued, in which shall be recorded each deposit and withdrawal as soon as made; the entry to state the amount in writing, and in figures, to be dated and signed by the depositor or depositary as the case may be. This pass-book must be brought to the depositary each time a deposit is made, or money withdrawn, that the transaction may be regularly noted.

73. The depositaries designated by the Company to receive deposits will be supplied with duplex tickets, upon which every deposit must be reported. The depositor must personally send to the Superintendent at Baltimore the duplicate ticket in a sealed envelope. The original will be sent to the same address by the depositary. Until each deposit is entered on the pass-book by the depositary, and the duplicate ticket forwarded to the Superintendent by the depositor, the transaction is not complete.

74. No persons other than those specifically designated by the Company are authorized to receive deposits, nor will this Department become responsible for any moneys not deposited in strict conformity with these Regulations. The Company guarantees the repayment of all deposits so made, and the payment of interest thereon under the terms and conditions herein set forth.

75. On all sums of five dollars and upwards that have been on deposit not less than three calendar months interest will be paid at the rate of four per cent. per annum (until changed by notice) from the first day of the month succeeding that in which the deposit was made. No interest will be paid on fractional parts of a dollar or for parts of a calendar month: Three months' notice will be given of any change in this rate of interest.

In addition to the interest guaranteed depositors, the Committee may, in their discretion, after the close of any fiscal year, award them dividends from the net earnings of the Savings Feature, in proportion to the interest credited to their respective accounts for that year.

76. Interest on deposits will be credited at the end of each fiscal year and will thereafter form part of the principal.

77. No interest will be allowed on any account after the expiration of ten years from the date of the last credit entry of the account exclusive of entries of interest.

78. A depositor wishing to withdraw money from the Savings Feature must forward to the Superintendent an order for the amount on the blank provided for the purpose and obtainable from the Superintendent or any designated depositary. Upon receipt of such order, a check for the amount in favor of the payee named in the order will be forwarded to the depositor in the care of the depositary designated in the order, who will deliver the same after entering the amount in the depositor's pass-book.

79. Checks not delivered in fifteen days will be returned by depositaries to the office of the Superintendent, and by him cancelled.

80. The Committee may require thirty days' notice of each order for the withdrawal of a sum exceeding one-fourth the entire deposit on which the order is drawn; though under ordinary circumstances this requirement will not be enforced.

81. No money will be paid or check delivered except to the depositor or to his or her order attested by a disinterested witness; and except upon identification of the person, presentation of the pass-book and entry of the transaction therein.

82. Presentation of a depositor's pass-book, together with an order from him in the form prescribed, at the office of the Superintendent, shall be conclusive evidence that the person presenting the same is the payee named in the order and shall make the delivery of the check and the payment of the money thereon to such person a valid delivery and payment as against the depositor, without liability therefor on the part of the Company or any of its agents.

83. A depositor who has ceased to be employed by the Company may retain his privileges as a depositor, if he then have a balance to his credit of not less than fifty dollars; otherwise, his account must be finally closed within thirty days, and balance if any withdrawn.

84. In case a depositor loses his pass-book, immediate notice of the loss must be given the Superintendent, and after a reasonable time has elapsed in which to notify all concerned a duplicate will be furnished so marked, upon the payment of fifty cents.

85. The pass-books held by depositors must, whenever required, be forwarded to the Superintendent by train mail. Regularly on the 30th day of September (or if that date falls on Sunday, then on the day preceding), each depositor must forward his or her pass-book to the office of the Superintendent (through the nearest depositary, who will receipt for it), in order that interest accruing on deposits may be properly entered therein.

#### *Borrowers.*

86. Any adult employé of the Company who is a member of the Relief Feature and has been continuously in the service not less than one year, may borrow from the Savings Feature sums not less than one hundred (\$100.) dollars, at the interest rate of six per cent. per annum, charged from the first day of the month in which the loan is consummated, upon the terms and under the conditions herein provided.

87. Any such employé wishing to secure a loan shall make an application in the form prescribed. The application should state particularly the amount of the loan, the purpose for which it is desired and the property offered as security therefor and that the applicant agrees to be bound by these Regulations.

88. The Superintendent will on receipt of the application obtain from the Building Inspector or other competent person a report on the value of the property offered as security, and from the proper official a report of the applicant's service record, and such other information as may be necessary to show that the applicant's case fulfils all the requirements of these Regulations. If the case fulfils all the requirements, the Superintendent will submit the application and all the information obtained by him to the Committee or sub-Committee thereof, who will in their discretion grant or refuse the loan, and whose decision shall be final.



89. Before any loan will be submitted to the Committee, it must appear to the satisfaction of the Superintendent that the money will be used to acquire or improve a homestead, situated within the limits hereinafter defined, or to free it from debt, and it must further appear from the reports obtained by the Superintendent, that the amount of the loan does not exceed three-fourths of the market value of the property offered as security, and that the service record of the applicant is good.

Preference will be given to those applicants who have the best service record and to those who will use the loan to acquire or improve a homestead. The homestead must be adjacent to the Baltimore and Ohio Railroad, or one of its branches or divisions within one mile thereof, unless located in a city through or into which such Railroad runs.

90. The Superintendent will promptly notify the applicant of the Committee's decision. If the loan be granted it will be subject to the approval of the title by the General Counsel of the Company, and the applicant must within 60 days forward to the Superintendent an abstract of the title to the property. Upon the approval of the title and the execution, delivery and recording of such conveyances and other instruments as the Counsel may deem necessary to secure the Department, the loan will be consummated and the money will be applied directly by the Superintendent for the purposes for which the loan was granted under the conditions herein provided.

The expenses of obtaining the abstract of title, drafting necessary papers, recording deeds, &c., including a fixed charge of \$5 for legal expenses in the Department, must be borne by the borrower. All title papers will be filed with the Department, until the loan is repaid.

Loans not consummated within 90 days from the date of the meeting at which granted, can be consummated only if again approved by the Committee.

91. No money will be paid directly to the borrower, but the Superintendent will with the approval of the borrower pay the purchase money of or discharge the liens or debts on the property. In case the loan be granted for the purpose of building on or otherwise improving real estate, the Superintendent will apply the money to the payment of bills for labor or material, approved by the borrower and certified by the Building Inspector of the Department; but no such bill will be paid before the completion of the building or improvement, and then only when it is clearly shown that the amount applicable is sufficient to discharge all lienable claims, and free the property from all liens, debts or incumbrances of any kind, and only when the said Building Inspector has certified that the value of the improved property exceeds by one-third the amount of the loan. Where the loan is found insufficient to meet these conditions it will not be increased, but will be cancelled, having been granted only on these conditions precedent.

92. Every borrower must provide life insurance in the natural death benefit of the Relief Feature, to an amount equal at all times to his indebtedness to the Savings Feature in such manner that the benefits payable in case of his death may be available to discharge the said indebtedness. If the borrower cannot under the Regulations of the Relief Feature obtain insurance therein to the amount of his indebtedness, he must provide in the same manner insurance on his life in some regular life insurance company satisfactory to the Superintendent.

93. The borrower must also keep the improvements on the property taken as security fully insured against fire, in a company approved by the Super-



intendent or designated by the Committee, and have the policy or policies therefor assigned in such a manner as the Superintendent may direct so as to protect the interests of the Savings Feature.

94. The borrower must promptly pay all taxes, assessments, public dues, charges and levied upon the property taken as security and present the proper receipts therefor for the inspection of the Superintendent whenever requested. If he fail to do so the Superintendent may, if he think such failure likely to impair the security, pay the same and deduct the sum so paid with legal interest from the borrower's monthly payments hereinafter required before crediting the latter upon the principal or interest of the loan.

95. The amount charged to the borrower's account for money loaned, and for expenses, premiums on life or fire insurance, taxes, or other charges paid on his account must be repaid with interest by payments into the Savings Feature on the first day of each calendar month, beginning with that following the one in which the loan is consummated at the rate of not less than one dollar and fifty cents (\$1.50) for every hundred dollars borrowed until the principal and interest be paid in full. The monthly payments will in the option of the Superintendent be applied to the payment of all the other charges in the account, before crediting any part upon the principal of the loan.

96. To secure the monthly payment of the sums above required, the borrower shall execute an order on the Company authorizing it to apply monthly from the first wages earned by him in each calendar month the amount of said monthly payment to the credit of his account with the Savings Feature, which order shall be irrevocable during the existence of his indebtedness and shall constitute an appropriation and assignment in advance to the Company in trust for the purpose aforesaid, of such portion of his wages having precedence over any other assignment by him of his wages or of any claim upon them on account of liabilities incurred by him, subject however to the assignment contained in his application for membership, in the Relief Feature.

97. A borrower who earns no wages in any month or who has left the service must at his own risk make his monthly payments to the Treasurer of the Company and should at the same time notify the Superintendent.

He must also keep the Superintendent advised of his address.

98. If a borrower fails to make the monthly payments required by these Regulations, so that three such payments are in arrear and unpaid, or if he make default in the payment of any premium for fire or life insurance or any tax, assessment or charge required to be paid by him under these Regulations for a period of thirty days after the same becomes due and payable, the whole amount of the principal sum and interest of his indebtedness shall become and be due and collectible at the option of the Committee, and the superintendent shall, if so directed by the Committee, take all steps necessary to sell and realize on the property held as security for said indebtedness.

99. Deductions from wages for the monthly payments of borrowers must be entered on the pay rolls opposite the names of the borrowers respectively in a separate column and designated at the foot of the roll as deductions to the credit of the Savings Feature.

The fact that a borrower has left the service must be noted on the pay roll on which the last payment to him is made.

## PENSION FEATURE.

100. The fund for the payment of pensions will be derived wholly from the contributions of the Company. The Company's contributions will be applied to the purposes which are herein stated in the order of their precedence.

*First.* To provide means of support during life for those persons members of the Relief Feature or of the Baltimore and Ohio Employés Relief Association for four consecutive years, who, having served the Company for ten consecutive years, and having reached the age of sixty-five, shall be honorably relieved from duty.

*Second.* To provide in the same manner for like persons who elect to retire from the service.

*Third.* If at any time the fund applicable to the purposes of this Feature shall, in the opinion of the Committee, be more than sufficient to provide for the persons mentioned above, such surplus shall be applied to aid or support such class or classes of the Company's employés, members of the Relief Feature, as the Committee may think most deserving and most in need of help, under such supplemental regulations as the Committee may then adopt.

101. No member shall be entitled to wages from the Company and to a pension allowance at the same time, or to benefits from the Relief Feature and a pension at the same time.

102. Pensions will be paid monthly. Each pensioner will receive a daily allowance, excluding Sunday, equal to one-half the benefits provided to be paid for sickness under the Regulations of the Relief Feature to a member of the class to which the pensioner would while in the service have been assigned under said Regulations, had he been required to become a full member in said Feature. In the case of a pensioner who has been continuously a member of the Relief Feature or the Baltimore and Ohio Employés Relief Association fifteen years this allowance will be increased by the addition of five per cent. thereof; and a like addition will be made for each additional term of five consecutive years of such membership.

The following table shows in brief the amount of allowance to pensioners:

	10 years member- ship, and under half sick rate.	15 years member- ship, 5 per cent. additional.	20 years member- ship, 10 per cent. additional.
Those contributing under Relief Feature to class <b>A</b> ,	\$0 25	\$0 26 $\frac{1}{4}$	\$0 27 $\frac{1}{2}$
Those contributing under Relief Feature to class <b>B</b> ,	50	52 $\frac{1}{2}$	55
These contributing under Relief Feature to class <b>C</b> ,	75	78 $\frac{3}{4}$	82 $\frac{1}{2}$
Those contributing under Relief Feature to class <b>D</b> ,	1 00	1 05	1 10
Those contributing under Relief Feature to class <b>E</b> ,	1 25	1 31 $\frac{1}{4}$	1 37 $\frac{1}{2}$

103. The Committee may at any time make a percentage reduction of all pensions, or further limit the classes of persons who may become pensioners.

104. The statement of a members' age contained in his application for mem-

bership in the Relief Feature, shall, for the purposes of this Feature, be final and conclusive.

105. For the purposes of this Feature members shall be considered as in the Company's service during the time they receive benefits from the Relief Feature.

106. The failure of any pensioner to claim his benefits for two years, counted from the last payment to him shall be presumptive evidence that such pension has terminated, by reason of the pensioner's death, and his name shall be stricken from the list of pensioners, subject to the right of restoration to the same on a new application by the pensioner, and satisfactorily accounting to the Superintendent for his failure to claim his pension.

107. Upon the death of a pensioner the accrued pension to the date of his death shall not be considered part of the estate of the deceased nor liable to be applied to the debts of said estate in any case whatever, but shall inure to the sole and exclusive benefit of his widow or children; and if no widow or child survive, no payment whatever of the accrued pension shall be made or allowed, except so much thereof as may be necessary to defray the expenses of the burial of the decedent, in case he shall not leave sufficient assets to meet such expenses, and the burial expenses thus to be allowed shall be in the discretion of the Superintendent.

108. Any pledge, mortgage, sale, assignment or transfer of any right or claim to any pension granted under these Regulations shall be void and of no effect, and no one save the pensioner himself, or, in the event of his death, his widow or children, shall be entitled to receive such pension; but the payment to persons laboring under legal disabilities may be made to such persons as the Committee may think proper.

109. No sum of money due, or to become due, to any pensioner under this Feature shall be liable to attachment, levy or seizure, by or under any legal or equitable process whatever, whether the same remains with the Relief Department or any agent thereof, or is in the course of transmission to the pensioner entitled thereto, but shall inure wholly to the benefit of such pensioner. Should any creditor of the pensioner endeavor to collect the pension by process of attachment or by any other legal or equitable process laid in the hands or served upon the Company or the Relief Department for the purpose of paying the debt due by the pensioner to such creditor or any part thereof, all the money due or yet to become due by the Department to such pensioner, shall be forfeited to the Department, and shall belong to it absolutely, to be dealt with as the Committee shall deem proper.

110. These Regulations shall in no way effect any pension heretofore granted to any person admitted to the Pension Feature of the Baltimore and Ohio Employés Relief Association.

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#### PLAN OF THE RELIEF FUND OF THE LEHIGH VALLEY RAILROAD COMPANY,

*Including The Penna. & New York C. & R. R. Co., The Geneva, Ithaca & Sayre R. R. Co. and the Morris Canal Co.*

FIRST. This Relief Fund is established and maintained by voluntary contributions from persons in the employ of either of these Companies and from the Companies themselves, for the benefit of those contributors in the em-



ploy of either Company who may be injured by accidents occurring to them while in the discharge of their duty to the Company, and for the families of those contributors who may lose their lives by such accidents.

SECOND. Every person employed by either of the Companies in any manner, may, if so disposed, at any time subscribe to the said Fund the amount of one day's wages, or less, but in no case is the amount subscribed to the Fund to exceed three dollars. The amount so subscribed to be taken from the pay roll for that month. Each of the Companies will, at all times, contribute to said Fund an amount equal to the aggregate of that paid in by all of the contributors in their employ.

THIRD. Each class of persons employed by the Company on each Road, Division or Canal, such as Engineers, Firemen, Conductors of each class of trains, Baggage Masters, Brakemen of each class of trains, Track Foremen, Laborers of each kind, Mechanics of each kind, etc., etc., may, after the first call made in each year, elect one of their number to act as their representative, in connection with the Superintendent or Assistant Superintendent of that Road or Division, in managing and drawing money from the Fund; such representatives to hold his appointment until his successor is elected in the same manner. Should the office of representative become vacant at any time, it may be filled by a similar election. In case of vacancy in the office of representative, by reason of failure to elect on the part of any one or more of the classes of Employés referred to or for other cause, the Superintendent of the Road or Division shall appoint some suitable person to fill the vacancy.

FOURTH. The money so raised shall be kept, without expense to the Fund, by an officer of the Lehigh Valley Railroad Company, to be designated by the President of said Company, and shall be subject at all times to the written orders drawn upon it, in accordance with these rules, jointly by the Superintendent or Assistant Superintendent of the Road or Division to which the entitled person is attached and the representative on that Road or Division of the class to which the entitled person belonged; and in every case some person having personal knowledge of the accident shall sign the order, such order to be countersigned by the General Superintendent or Assistant General Superintendent.

The Superintendent or Assistant Superintendent of the Road or Division and the representative together shall determine when such payment shall cease.

FIFTH. No money shall be paid out of the Fund except upon such joint written orders of a Superintendent or Assistant Superintendent and of the proper representative, countersigned by the General Superintendent or Assistant General Superintendent as above stated, and no one shall be entitled to the benefit of the Fund except, *First*: Employés of either of said Companies who shall have contributed to the Fund on or subsequent to the last previous call and before the time of their accident, and who shall have been accidentally injured while in the discharge of their duty to the Company.

*Second*: Widows or children of such contributors so injured or killed as specified in section sixth.

SIXTH. The money of the Fund shall be appropriated and drawn out, as provided in sections fourth and fifth, for the benefit of those entitled to it, as follows, viz: In case of a disabling accident of the kind mentioned in section first to a contributor not in arrears to the Fund, he shall be allowed from the Fund three-fourths as much per day as that contributed by him to the Fund, for every working day during his total disability to work, but not



longer than for the period of nine months, but in no case will Sunday be counted in as a working day. In case such accident results in the death of such contributor not in arrears to the Fund, such death occurring at once or within six months from the time of accident, \$50.00 shall be appropriated and paid from the Fund for his funeral and other immediate expenses, and if he leaves a widow or a child or children under 16 years of age, an allowance of three-fourths the amount of his contribution, for every working day, shall be appropriated and paid to the widow monthly for the period of two years from the time of said contributor's decease, provided the said widow remains unmarried during that time; or, if there be no widow, then the said allowance of three-fourths the amount of his contribution, for every working day, shall be appropriated and paid to such minor child or children, jointly for the period of two years, or until the youngest attains the age of 16, if less than two years. In case such accident results in the loss of a limb which can be artificially replaced, appropriation and payment shall also be made from the Fund for the purchase of a proper artificial limb.

To insure to subscribers these benefits from the Fund, all cases of disabling injuries must be reported, immediately after the occurrence, to the Conductor, Foreman, or other person in charge of the work, whose duty it shall be to investigate the case and report the same to his superior officer.

SEVENTH. The payment on each call is to cover the risk of the contributor to such accident up to the time of the next call but no longer, and no such payment or payments will, in any case, be refunded to the contributor.

EIGHTH. Whenever said Fund shall, by its appropriation or use as above prescribed, become so much reduced as to need replenishing, the Companies will call for another payment of the amount prescribed in article second. Each contributor shall then have the option to renew his contribution or not as he may choose.

To old subscribers who renew their subscriptions with every call, the benefits from the Fund will be continuous, subject, whoever, to sections fourth, fifth and sixth of this plan. Any employé of these Companies, not a member of the Fund, may subscribe to it at any time, but accidents occurring to such new subscriber previous to the first day of the month following his subscription will not entitle him to relief from the Fund.

NINTH. A list of contributors to the Fund, corrected after each call, shall be kept in the office of the Treasurer of the Fund, showing the date from which each contributor became entitled to its benefits.

TENTH. The Companies reserve the right to give notice of any change which they, the Companies, desire to make in the plan; such notice to be given at the time of making any call, and the specified changes to take effect from and after the time when contributors become entitled to relief on said call; and the Companies reserve the right to give notice at any time to the contributors that no further contributions will be called for. In case of such notice, no contribution will thereafter be received from either of the Companies or from any of their employés, and the Companies will thereafter use the remaining balance of the Fund for the purposes and in the manner herein set forth until all of the said money shall be so used, at which time the benefits of the Fund shall cease.

ELEVENTH. As the Companies contribute one-half of the entire fund so provided, and take upon themselves the trouble and expense of the management of the Fund, they will not consider themselves bound to give any aid whatever to any person or to the family of any person in their employ who has refused or neglected to become a contributor to said Fund.

## CUMBERLAND VALLEY RAILROAD RELIEF ASSOCIATION.

The Cumberland Valley Railroad Relief Association was organized for the purpose of providing a fund from which members can draw five dollars per week in case of sickness or other disability, and three hundred dollars in the event of death. Persons not in the employ of the company cannot become members of the association. It is optional with the employés of the railroad whether they become members or not. There are no salaried officers, the officers of the Cumberland Valley Railroad Company serve in their respective capacities without compensation. A manager and board of directors are elected annually from the members, and each class of employés having representation in the board. The monthly dues of each member is seventy-five cents, and if the regular monthly dues do not, at any time, amount to enough to pay sick and death benefits, the board of directors may levy an assessment on each member to make up the deficiency, provided the entire assessment shall not at any time exceed one dollar per month.

The association was organized January 1, 1889, and since then, to January 1, 1891, two years, there has been paid into the treasury \$9,353.00 and \$7,494.99 distributed to members for sick and death benefits, leaving a balance, January 1, 1891, of \$1,858.01.

The total membership, January 1, 1891, was 506.

The total number of deaths from January 1, 1889, to January 1, 1891, was 18.

The total amount paid for sick benefits from April 1, 1889, to January 1, 1891, was \$2,094.99.

## CONSTITUTION OF THE CUMBERLAND VALLEY RAILROAD RELIEF ASSOCIATION.

## ARTICLE I.

The Association shall be called the Cumberland Valley Railroad Relief Association.

## ARTICLE II.

*Organization.*

The officers shall consist of a President, Secretary, Treasurer, Manager, and a Board of six Directors; the six directors to be elected annually at a meeting of the contributing members.

## ARTICLE III.

The President and Treasurer of the Cumberland Valley Railroad Company shall be the permanent President and Treasurer of the Association, and the Manager shall be elected at the annual meeting of the Association. The Secretary shall be appointed by the President, whose duty it shall be

to keep the minutes of the Association, send out all notices and discharge such duties as may be prescribed by the Board, and who shall be paid by the Cumberland Valley Railroad Company for his services. No salary shall be paid to any officer of the Association, and it being further understood that the Railroad Company will furnish all the blanks, books, &c., necessary without charge.

#### ARTICLE IV.

There shall be an Advisory Committee of three members chosen annually by the Board of Directors, and from the Board, of which committee the Manager will be chairman; which committee shall have general oversight of the business affairs of the Association at such times as the Board of Directors are not in session.

#### ARTICLE V.

It shall be the duty of the Manager to prescribe the blanks and forms to be used, to certify to the President all cases of death or sickness entitled to relief, and he shall see that all business of the Association is promptly kept up, report all cases of withdrawal and causes therefor, and perform such other duties as may be prescribed by the Board of Directors. In case of death or resignation of the Manager, his place will be filled by appointment of the President, subject to the approval of the majority of the Directors.

#### ARTICLE VI.

##### *Membership.*

All persons now members of the Cumberland Valley Railroad Mutual Aid Association, and now employés of the Cumberland Valley Railroad Company, may become members of the Relief Association.

#### ARTICLE VII.

After the organization of the Relief Association, all persons in the employ of the Cumberland Valley Railroad Company, who are under fifty years of age, and who have been at least three months in the regular service of the Company, and are not at the time of their application suffering from an incurable disease, shall be eligible to membership upon application to the Board; all admissions to membership to be subject to approval by the Board. All persons uniting with the Association shall pay an initiation fee of one dollar.

#### ARTICLE VIII.

##### *Dues and Benefits.*

Contributions shall be made monthly, and such contributions shall be deducted from the amount of the member's pay roll of the preceding month, and placed to his credit in the Relief Fund.

#### ARTICLE IX.

The monthly contribution of each member shall be seventy-five cents. When the number of members shall be six hundred and over, then the amount to be paid at each death shall be four hundred dollars. The payment for sick benefit shall be five dollars per week, provided that the payment to any one for sick benefit shall not exceed one hundred dollars in any one year.



## ARTICLE X.

Any member of the Association, except as hereinafter provided, becoming sick or disabled shall be entitled to the sum of five dollars per week as before stated, provided his disability has not been occasioned by intemperance, vicious or immoral conduct. That all members who by reason of disability, whether from accident or sickness, are incapacitated from work for a period of one week, shall be entitled to sick benefit for that week, but no benefits shall be paid for a period less than one week. A certificate from a reputable physician must, in all cases, be furnished to entitle the member to draw said benefit, and in case of protracted sickness or disability, a certificate must be furnished semi-monthly.

## ARTICLE XI.

In case of death, the death benefit to be paid to the wife. If the wife be dead, then to the children of deceased member; and if any of the children be minors, the share of such minors may be paid by the Board to a guardian, or expended at their discretion for the benefit of such children. In case the deceased member leaves neither wife nor children, then and in that case, the death benefit to be paid to his next of kin. In all cases a member may direct, by his last will and testament, the payment of his death benefit.

## ARTICLE XII.

*Forfeiture of membership.*

Any member leaving the service of the company for whatever cause, shall not forfeit his membership, provided he pays into the Treasurer's hands his monthly dues in advance, but any one thus leaving, who shall engage in any more hazardous business, or whose habits shall have become such in the judgment of the Board, as would originally have excluded him from membership, or who shall remove his residence outside the States through which the Cumberland Valley Railroad and leased lines run, the Board may at their discretion, upon notice to the person so having left, erase his name from the roll of members by refunding to such person one-half of all the money that he has paid in, after deducting therefrom whatever amount such person may have received as sick benefit.

## ARTICLE XIII.

Any member may cease to continue his membership at any time by notifying the Manager in writing, but such withdrawal forfeits all the amounts he may have paid in.

## ARTICLE XIV.

Any member who may become in arrears more than thirty-one days, shall cease to be a beneficiary until one month after such arrears are paid in full, nor can any member who is in arrears, if taken sick or disabled, by the payment of his arrearages, become a beneficiary during such sickness, and any member who is in arrears for a period of three months can only be re-instated to membership by the application to, and consent of, the Board of Directors.



## ARTICLE XV.

*Contingent Provisions.*

If the regular monthly assessments do not amount to enough to pay sick and death benefits, the Board of Directors may levy an assessment upon each member so as to make up the deficiency, provided the entire assessment shall not at any time exceed one dollar per month.

## ARTICLE XVI.

It is further provided, that no sick benefits shall be paid until three months after the organization of the Relief Association, and that no member hereafter joining the Association shall receive a sick benefit within the first three (3) months of his membership.

## ARTICLE XVII.

*Special Class.*

All members of the Mutual Aid Association who are debarred from membership on account of age or location of residence, or who were not, on date of organization, in the employ of the Cumberland Valley Railroad Company, may become members of a special class upon application and election by the Board, upon the payment of an initiation fee of one dollar, and monthly dues of fifty cents into the treasury, said dues payable in advance and subject to the same rules regarding payment of dues as other members of the Association. To such members a death benefit of three hundred dollars will be paid, but they will not be entitled to any participation in the sick benefits of the Association.

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## PHILADELPHIA AND READING RAILROAD RELIEF ASSOCIATION.

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The Philadelphia and Reading Railroad Relief Association was organized at Reading, at a meeting of representatives, of the employés of the various Divisions and Departments of the service of the Philadelphia and Reading Railroad Company, October 30th, 1888, and is therefore in the third year of its existence.

The Philadelphia and Reading Railroad Company is a contributor to the fund to the extent of ten per centum of the payments made by the members up to \$1,000,000, and thereafter five per centum perpetually, and provides all the facilities for conducting the business of the Association; besides contributing the whole amount necessary for clerk hire, stationery, etc., thus saving to the members a large amount of money, which would otherwise fall upon the fund.

The fund is thus left liable only for the payment of benefits, and such other payments as may from time to time be especially authorized by the members, or their representatives.

In operation it has the same practical effect as if the Railroad Company had two sets of pay rolls, one for employ  s on duty, and the other for employ  s off duty, on account of sickness or other disability. When wages stop, benefits begin, and continue until return to duty, and payment of wages is resumed, and so on, and in case of death, from either accident or natural cause, provision is made for the payment of a death benefit varying in amount from \$250 to \$1,250, according to classification of members.

The payment of benefits to permanently disabled members, and pensions to superannuated employ  s, are matters to be considered, and adjusted whenever it is thought the surplus fund of the Association, now amounting to nearly two hundred thousand dollars (\$200,000), will warrant it.

The membership of the Association, embraces all Departments of the service of the Philadelphia and Reading Railroad Company, and of its affiliated, controlled, and leased lines, and includes all classes of employ  s, from the highest officials, down to track men.

The contributions are made monthly from the pay of the members, whereby the Association is enabled to collect dues without trouble or expense to the fund.

It would be almost impossible for any Association of this nature, with a membership of 15,000 or 20,000, to collect monthly dues in any other way, than through the Accounting and Pay Departments of the Corporation; and in this instance, at least, collections are made with the greatest promptness and regularity, and the fund is always in condition to meet payments promptly.

The following statement shows the operation and financial condition of the Association for the fiscal year ending November 30th, 1890:

*Receipts.*

Balance on hand November 30th, 1889, per Auditors' Report.....	\$105,758 42
Deduct amount due Philadelphia and Reading Railroad Company.....	\$5,892 90
Less amount due by Philadelphia and Reading Railroad Company.....	1,751 21
	4,141 69
Surplus, December 1st, 1889.....	\$101,616 73
Contributed by members to November 30th, 1890....	216,329 65
Contributed by Philadelphia and Reading Railroad Company to November 30th, 1890.....	19,558 80
Interest on bank balance.....	995 38
Interest from investments.....	4,933 75
	\$343,434 31

*Disbursements.*

Death benefits. ....	\$86,196 40
Disablement benefits. ....	88,612 40
Contributions returned. ....	2,280 23
	<hr/>
	\$177,089 03
Surplus. ....	<hr/>
	<u>\$166,345 28</u>

Invested and accounted for as follows :

Philadelphia and Reading Railroad Company General Mortgage four per cent. bonds. ....	\$57,251 25
Perkiomen, Railroad Company five per cent bonds. ....	26,000 00
Catawissa Railroad Company, preferred stock. ....	20,912 50
Cash balance, November 30th, 1890. ....	62,181 53
	<hr/>
Total. ....	<u>\$166,345 28</u>

NOTE.—Of the cash balance on hand November 30th, 1890, \$59,767 50 was invested during the month of December 1890, in Philadelphia and Reading Railroad Company General Mortgage four per cent. bonds.

The following statement shows the number of deaths and disablements occurring during the year:—

*Deaths.*

Accident. ....	100
Natural. ....	104
	<hr/>
Total. ....	<u>204</u>

*Disablements.*

On hand December 1st, 1889. ....	515
Accident. ....	2,718
Sick. ....	6,634
	<hr/>
Total. ....	<u>9,867</u>

Of the disablement cases, benefits in 2,560 accident cases and 3,098 sick cases were paid and the cases closed. Eighty-eight members died during disablement, 33 were in receipt of wages, and 3,096 recovered within seven days, leaving 992 cases on hand at the end of the year.

The membership was 14,596, equal to 98 per cent. of the employés of the Company eligible to membership in the Association.

REGULATIONS GOVERNING THE PHILADELPHIA AND READING  
RAILROAD RELIEF ASSOCIATION.

## REGULATIONS.

*General.*

1. The "Relief Association" is an association composed of employés of The Philadelphia and Reading Railroad Company, and of its affiliated, controlled and leased lines, in the executive charge of a Superintendent, whose directions in carrying out its regulations are to be complied with, subject to the control of an Advisory Committee. The Superintendent shall be appointed by the General Manager of The Philadelphia and Reading Railroad Company.

2. The object is the establishment and management of an association to be known as the "Relief Association," for the payment of definite amounts to the contributors to the Fund, who, under the regulations, shall be entitled thereto, when they are disabled by accident or sickness, and in the event of their death, to the relatives or other beneficiaries specified in the application of such contributors.

3. The Relief Fund, from which the proposed benefits are to be paid, will be formed by voluntary contributions from employés, and income or profit derived from investments of the moneys of the Fund, and such gifts or legacies as may be made to the Association for use of the Fund.

4. The Philadelphia and Reading Railroad Company will assume all the expense of clerk hire, office room, and all charges for stationery, etc., required in the conduct or management of the organization, leaving the Fund liable only to legitimate demands to be made upon it, and will facilitate in every way, without any charge therefor, the investment and handling of the Fund from time to time, for the benefit of the Association, as well as become a contributor to the Fund to the extent of ten per cent. of the amount from time to time contributed by the employés, until the total sum contributed by both employés and the Company shall reach one million dollars.

In the event of a deficit in the Fund prior to the total contribution of said ten per cent., The Philadelphia and Reading Railroad Company will guarantee the covering of said deficit to the full amount of the proposed subscription or contribution, to wit, one hundred thousand dollars; and when the fund shall amount to the said sum of one million dollars, the Railroad Company make a further contribution to said Fund to the amount of five per cent. of all sums contributed beyond said one million dollars.

5. There shall be an Advisory Committee constituted as follows:

The General Manager of The Philadelphia and Reading Railroad Company shall be *ex-officio* a member and Chairman of the Committee.

The other members of the Committee shall be chosen annually, in the month of November, to serve for one year from the first day of December next succeeding their election and until their successors are chosen, as follows:

By the contributing members of the Main Line Division, including the Canal, Steam Collier, Coal Barge, Shipping, Telegraph and Motive Power Departments and the General Store Keeper's Department, one member;

By the contributing members of the General Office, including Special Officers, one member;



By the contributing members of the Atlantic City Railroad Company and Kaighn's Point and Philadelphia Ferry Company, one member;

By the contributing members of the Philadelphia, Harrisburg and Pittsburgh Railroad Company, one member;

By the contributing members of the Philadelphia and New York Division, one member;

By the contributing members of the Williamsport Division, one member;

By the contributing members of the Reading and Columbia Division, one member;

By the contributing members of the Pine Grove Division, one member;

By the contributing members of the Catawissa Division, one member;

By the Board of Managers of The Philadelphia and Reading Railroad Company, seven members.

The members selected by the contributing employes shall be chosen by ballot, the vote being counted and the result determined by tellers selected by the Advisory Committee. Each member of the Relief Association will be entitled to cast one vote.

For the Committee to serve during the first fiscal year, and to fill vacancies occurring thereafter, the members to represent the employes shall be designated by the General Manager. Such members and the members to be chosen by the Board of Managers, for the original committee or to fill vacancies, shall serve until their successors are duly chosen as above provided. The Superintendent of the Relief Association shall be Secretary of the Committee.

6. The Advisory Committee shall have general supervision of the operations of the Association, and see that they are conducted in accordance with the Regulations.

The Committee shall hold stated meetings once in three months, at such time and place as they shall determine, and shall meet at other times at the call of the General Manager as Chairman.

It shall be the duty of the Chairman to call special meetings of the Advisory Committee upon the written request of seven of its members.

7. The Superintendent shall have general charge of all the business pertaining to the Association, and prescribe the forms and blanks to be used and the reports to be made to the Association.

He shall certify to the correctness of all bills and check rolls for employes of the Association, and send them to the General Manager for approval.

He shall employ, with the approval of the General Manager, such employes as may be necessary for the proper conduct of the business of the Association.

He shall furnish to the Advisory Committee such reports as they may require.

8. Medical examiners will be selected, who shall, under the direction of the Superintendent of the Relief Association, prepare applications for membership, and make the required physical examination of applicants for membership in the Relief Association, and perform such other duties as may from time to time be assigned them; the expense of maintaining said Corps to be borne by the Relief Association.

9. The moneys received for the Relief Fund shall be held by the Treasurer of The Philadelphia and Reading Railroad Company, and shall be deposited as a separate fund to the credit of the Association subject to drafts by such Treasurer only when the same are countersigned by the General Manager. The Advisory Committee shall direct the investment, and any changes therein, of money which is not required to be kept on hand for current use.

If during any successive period of three years there should be a surplus, after making due allowance for liabilities incurred and not paid, such surplus shall be used in the promotion of a fund for the benefit of superannuated members, or in some other manner for the sole benefit of members of the Relief Association, as shall be determined by vote of two-thirds of the Advisory Committee.

10. The fiscal year of the Relief Association shall begin with the first day of December in each year.

11. The condition of the Relief Fund at the close of each fiscal year shall be audited and reported on by a competent person or persons, selected for that purpose by those members of the Advisory Committee who are chosen to represent the members of the Relief Association.

12. Amendments to or changes in the Relief Association may be proposed by the Advisory Committee, but such shall not be operative unless presented at a stated meeting of the Committee, and considered and adopted at a subsequent stated or special meeting by a majority of the whole Committee; and such amendments or changes adopted and duly announced, shall be binding upon the members of the Relief Association from the dates fixed in the Resolutions approving the same.

#### *Membership.*

13. Those participating in the benefits of the Relief Fund will be known as "Members of the Relief Association."

14. In referring to the employés of the Company, the expressions "service" and "in the service," will refer to employment upon or in connection with any of the railroads or works the employés of which shall be admitted to membership in the Relief Association, and the service of any employé shall be considered as "continuous" from the date from which he has been continuously employed, without interruption, upon or in connection with either of such railroads or works, or two or more of them successively.

15. Members will be classified according to the amount of their regular pay per month, as follows:

1st Class—Those receiving not more than forty dollars (\$40.00).

2d Class—Those receiving more than forty (40) and not more than sixty dollars (\$60.00).

3d Class—Those receiving more than sixty (60) and not more than eighty dollars (\$80.00).

4th Class—Those receiving more than eighty (80) and not more than one hundred dollars (\$100.00).

5th Class—Those receiving more than one hundred dollars (\$100.00).

For members not paid by the month, the classes will be determined as nearly as possible by the usual amount of earnings per day multiplied by twenty-six (26).

In cases of doubt as to the proper classification the Superintendent of the Relief Association shall decide.

16. Any employé in the service on October 1st, 1888, shall have, for the period of six months thereafter, the privilege of becoming a member in the class determined by his pay, without regard to age, if he is physically able to perform the duties of his position.

After March 31st, 1889, any employé not over 45 years of age may become a member in the class determined by his pay or any lower class, upon passing a satisfactory medical examination.

Any member whose pay is advanced may enter any higher class corresponding to his advanced pay without medical examination.

17. In indicating the relations to the Company's service of employes relieved of employment and pay therein, the following terms shall be used:

"Resigned" for those voluntarily leaving the service;

"Relieved" for those permanently relieved without fault on their part;

"Discharged" for those permanently relieved for cause;

"Furloughed" for those temporarily relieved without fault on their part.

"Suspended" for those temporarily relieved as a penalty for offenses.

18. A member who is furloughed or suspended for a period extending beyond the date to which his contributions shall have been made, and not longer than nine (9) months, may keep up his title to benefits during such furlough or suspension, by paying his contributions in advance for each month, and in other respects complying with the regulations.

If a member who is absent from duty by reason of furlough or suspension or other cause than disablement and not receiving wages, shall fail to contribute for a period of three consecutive calendar months, his membership shall cease at the expiration of that time. If contribution by such member is resumed at or before the expiration of three consecutive calendar months, the title to benefits shall recommence upon the date from which contribution is resumed.

#### *Applications.*

19. Participation in the benefits of the Relief Fund must be based upon an application by the proposed member, in the form prescribed in Regulation No. 20, approved by the Superintendent of the Relief Association, and upon a certificate of membership issued by him to the Applicant.

20. Applications shall be in the following form:

#### *Application for Membership in the Relief Association.*

*To the Superintendent of the Relief Association.*

I .....of....., in the county of.....and State of..... employed in the service of.....as .....the....., do hereby, by reason of such employment, apply for membership in the Relief Association and consent and agree to be bound by the Regulations of the Relief Association, as contained in the book of said Regulations, approved by the Advisory Committee, which I have read or have had read to me, and by any other regulations of the said Association hereafter adopted.

*I also agree*, That the said Company, by its proper agents, and in the manner provided in said Regulations, shall apply, as a voluntary contribution from any wages earned by me under said employment or from benefits that may hereafter become payable to me, at the rate of .....(\$.....) per month, for the purpose of securing the benefits provided for in the Regulations for a member of the Relief Association of the —class. Death benefit shall be payable to (a) .....

.....  
.....  
.....

(b)

or to such other person or persons as I shall subsequently duly designate in writing, in substitution therefor, with the approval of the Superintendent



of the Relief Association, if living at the time of my death, and not withdrawn as my beneficiary; otherwise, to my wife (or husband) or in the event of my having at death no wife (or husband) living, then to my children collectively, each to be entitled to an equal share, including, as entitled to the parent's share, the issue of any deceased child, or, if there be no children or such issue living, then to my father and mother jointly, or the survivor, or if neither be living, then to my next of kin (payment in behalf of such next of kin to be made to my legal representatives); or, if there be no relatives living, the benefit otherwise payable shall lapse, and the amount thereof shall remain as a part of the Relief Fund, without claim for the same, and the necessary funeral expenses shall in such case be paid from the Relief Fund; and any funeral or other expenses incident to my death, which shall have been paid by the Superintendent of the Relief Association, shall be held to be in part payment of the said Death Benefit, and shall be deducted from the total amount thereof before payment to the person or persons entitled to receive the same; and in consideration of the contribution to be made by The Philadelphia and Reading Railroad Company to the Fund of the Association, I agree that the acceptance of benefits from the said Relief Fund for injury or death shall operate as a release of all claims for damages against my employer, arising from such injury or death, which could be made by or through me, and that I or my legal representatives will execute, or where necessary procure to be executed by others, such further instrument as may be necessary formally to evidence such acquittance.

*I also agree*, That this application, when approved by the Superintendent of the Relief Association, shall make me a member of the Relief Association, and constitute a contract between myself and the said Company, and that the terms of this application and the Regulations of said Association shall, during my membership, be a part of the conditions of my employment by the Company, and that the same shall not be avoided by any change in the character of my service, or locality where rendered, while in such employment, nor by any change in the amounts applicable from my wages to the Relief Fund, which I may hereafter consent to, and that the agreement that the above named amounts shall be appropriated from my wages, shall apply also to any other amounts arising from changes made as aforesaid, and shall constitute an appropriation and assignment in advance, to the said Association in trust, for the purposes of the Relief Fund, of such portions of my wages, which assignment shall have precedence over any other assignment by me of my wages, or of any claim upon them on account of liabilities incurred by me.

*I also agree*, For myself, and those claiming through me, to be especially bound by the Regulation providing for final and conclusive settlement of all disputes, by reference.

*I certify*, That I am correct and temperate in my habits; that so far as I am aware, I have no injury or disease, constitutional or otherwise, which will tend to shorten my life, and am now in good health and able to earn a livelihood.

*I do hereby further acknowledge, consent and agree*, That any untrue or fraudulent statement made by me to the Medical Examiner, or any concealment of facts in this application, or my resignation from the service of the said Compny, or my being relieved from employment and pay therein at the pleasure of the Company or its proper officers, shall forfeit my membership in the aforesaid Relief Association and all benefits, rights or equities arising therefrom, excepting that my leaving the service shall not (in the absence



of any of the other foregoing causes of forfeiture) deprive me of any benefits to the payment of which I shall have previously become entitled by reason of accident or sickness occurring while in the service.

*In witness whereof*, I have signed these presents at.....in the county of..... State of.....this (c) .....day of .....A. D. 18 ...; dated to take effect from.....18....

*Witness:*

*The following made before execution,*

The foregoing application is approved at the office of the Superintendent of the Relief Association, this.....day of.....A. D. 18....

*Superintendent of the Relief Association.*

Before preparing an application refer to the instruction relating thereto.

a. If no beneficiary is specially designated draw lines through the blank space and the lines in italics. The witness is not to note these erasures, but must particularly describe over his signature as "made before execution," all other erasures, alterations or interlineations.

The part commencing with the lines in italics and ending with the words "received the same," is inserted in the blank in the form of application contained in the Regulations, for the convenience of the applicant, and may be varied from if not expressing his wish.

c. The first date is the date of execution and the second the date upon which the application is to take effect.

21. Immediately upon any one entitled to membership signifying a desire to become a member of the Relief Association, notice of the same shall be sent from his employing officer in the manner required, to the Superintendent of the Relief Association, and to the Medical Examiner of the district in which the person is employed. The latter will as soon thereafter as possible make the necessary inquiries of the applicant, and medical examination when such is required, advise the proper employing officer and the applicant of the result, and, if it is favorable, complete and forward the application.

22. Applications shall take effect at their dates, excepting as to persons not on duty, in which cases they will take effect at any subsequent dates upon which the applicants go on duty.

23. An application may be dated upon any date in the month next following that in which it is signed, if the applicant desires it to take effect upon such date.

24. An applicant may, in his application or subsequently, designate a beneficiary to receive his death benefit other than relatives entitled to recover the amount payable in the event of the death of the applicant, on giving good and sufficient reasons for such designation.

25. Benefits payable on account of the death of a member shall be payable only to the beneficiary or beneficiaries designated in his application to receive the same, if living at the death of said member. If the designated beneficiary shall be other than the relatives named below, and shall not be living at the death of said member, then the benefit shall be payable to the wife (or husband) and children, or in the event of the applicant at death having neither wife (or husband) nor children living, then to the father and mother or the survivor, or if neither of these be living then to the next of kin, if there be any such. If there be no relatives living, the benefits other-

wise payable shall lapse and the amount thereof shall remain as a part of the funds of the Association, without claim for the same, and the necessary funeral expenses shall, in such case, be paid by the Association.

26. Unless otherwise directed by the Superintendent of the Relief Association, an application of a married woman must be signed also by her husband, and that of a minor by the father or other legal guardian.

*Contributions.*

27. Contributions shall be made monthly in advance, at the following rates : For the first class, seventy-five(75) cents per month ; for the second class, twice as much (\$1.50) ; for the third class, three times as much (\$2.25) ; for the fourth class, four times as much (\$3.00) ; and for the fifth class, five times as much as for the first (\$3.75).

28. The contribution for part of a month shall be a proportional part of the amount for a whole month, and an amount to be collected or refunded for part of a month shall be estimated at one-thirtieth part of the amount for the whole month, for each day, adding to make even cents where fractions occur. The time for which such estimate is made shall include the date upon which an application takes effect or a member goes on duty after absence, and shall exclude all after the date upon which membership ceases.

29. Contribution for a whole month will be due on the first day of such month. It will ordinarily be deducted from the gross amount of the member's wages on the pay-roll of the preceding month and placed to his credit in the Relief Association.

30. When an application is to take effect upon the first day of a month, the contribution for that month shall be made on the roll of the preceding month, if the application is received by the 25th of the latter month. In other cases the contribution for a month or any unexpired part of a month in which an application takes effect or a member goes on duty after absence, shall be made on the roll of that month, together with the contribution for the next month.

If absence is from disablement, and the member shall recover in a month for which he has not contributed, he shall not contribute for the remainder of that month, but will be entitled to benefits for disablement or death occurring during such month.

31. A member who, for other reason than disability, earns no wages in a month, from which his contribution may be made, shall not be entitled to benefits in the next month, unless he shall have otherwise made the proper contribution in advance.

32. When a member is disabled or dies in the month in which his application takes effect, his contribution for that month will be deducted from the wages earned therein or from the benefits payable if the wages are not sufficient, and the amount of contribution shall be for the unexpired part of the month, commencing with the date upon which the application takes effect.

33. A member shall not make contribution for any time during which he is entitled to disablement benefits after the month in which the disability begins. When wages are paid during disability the usual contribution will be made.

34. No contribution is to be deducted from the final payment of wages to a member leaving the service, excepting for contributions in arrears, and there shall be returned to him so much of his last contribution as covers the part of the month succeeding the date on which he leaves the service, for

which he must give a receipt in the prescribed form. When the amount cannot be otherwise learned, it will be ascertained from the Superintendent of the Relief Association.

35. No part of the contribution of a member will be refunded in the event of his death.

Benefits.

36. Members will be entitled to the following benefits :

*First*—Payments while disabled by accident in the Company's service, for each day during a period of not longer that fifty-two (52) weeks, at the rate of fifty (50) cents per day for a member of the first class, and of greater amounts for members of the other classes, in proportion to their contributions.

*Second*—Payments while disabled by sickness or by injury other than accident in the Company's service, for each day after the first seven days of such disability, and for a period not longer than fifty-two (52) weeks. at the rate of forty (40) cents per day for a member of the first class, and of greater amounts for the other classes in proportion to their contributions ; provided that if a member shall have returned to duty after disability from sickness and shall again be disabled by sickness within less than two (2) weeks from his return to duty such disablement shall be counted with the prior one in computing the fifty-two (52) weeks for which payments may be made and the deduction of seven (7) days shall not be made therefrom.

A member after receiving for fifty-two (52) weeks the payments herein provided for shall by contributing for the death benefit retain the title to payments in the event of death occurring while continuing disabled and unable to engage in any occupation. In such case the contribution for such death benefit shall be at the rate in Regulation 37 applicable to the class in which he last contributed. If such member shall be able to return to duty and shall so return and resume full contribution he shall be entitled to payments for disablement by accident occurring thereafter in the Company's service and to payments for disablement by sickness occurring after he shall have been continuously engaged in the performance of duty for a period of four weeks.

*Third*—A payment upon the conditions prescribed in the Regulations on the death of a member from accident or other cause occurring during time for which he shall have contributed or while receiving disablement benefits or during a month in which he shall have recovered from disability, of two hundred and fifty dollars (\$250) for a member of the first class and of greater amounts for the other classes in proportion to their contributions.

37. The following table exhibits the amounts of the contributions and benefits of the several classes :

	1st CLASS.	2d CLASS.	3d CLASS.	4th CLASS.	5th CLASS.
					OVER
Highest possible pay for each class. . . . .	\$40 00	\$60 00	\$80 00	\$100 00	\$100 00
Rates of contribution per month. . . . .	75	1 50	2 25	3 00	3 75
Accident benefits per day for fifty-two weeks, . . . . .	50	1 00	1 50	2 00	2 50
Sick benefits per day, not including first seven days and not longer than fifty-two weeks, . . . . .	40	80	1 20	1 60	2 00
Payments in the event of death. . . . .	250 00	500 00	750 00	1,000 00	1,250 00



38. Benefits and other claims upon the Relief Association shall be paid out in conformity with the financial methods of the Association and on orders of the Superintendent of the Relief Association upon his receiving satisfactory certificates respecting the claims from the Medical Examiners and other proper officers.

39. Payments on account of disablement by accident will only be made upon the disablement being shown to have resulted solely from accidents occurring to members in the performance of duty in the service of the Company to which they were assigned or which they were directed to perform by proper authority or in voluntarily protecting the Company's property. This shall include accidents occurring to members at points upon the Company's property which they are required to pass when going to or from work and which do not result from their voluntarily or unnecessarily exposing themselves to danger. There must be exterior or other positive evidence of injury and satisfactory evidence that it renders the person totally unable to labor or when of a permanent character to earn a livelihood in an employment suited to his capacity. Disablement from accident occurring otherwise than as aforesaid will be classed with sickness.

Questions as to the permanent character of disability and the continued payment of benefits on account of the same shall be determined by the Advisory Committee.

40. If a member of the Relief Association who has recovered from disability from accident in the Company's service shall continue disabled from sickness or debility he shall be entitled to sick benefit to a date not later than that to which he would have been entitled thereto if the whole of the disability had been from sickness and at corresponding rate.

41. If a member of the Relief Association shall die during disablement from accident or sickness the death benefit which may be payable shall not be subject to deduction of previous payments for disablement benefits.

42. A member of the Relief Association shall be entitled to benefits in the event of disablement or death during the time intervening between the first of the month and payment of his wages and also from the date his application takes effect and from any date upon which after absence he returns to duty in a month for which he has not contributed notwithstanding the fact that his contribution shall not be actually made until the payment of wages from which it is to be deducted.

43. An employé entitled to become a member who shall have applied for membership shall not be debarred from receipt of benefits for disablement or death from accident in the service because of his application not having been approved if before medical examination or during the consideration of his application an accident shall occur to him in the discharge of his duty as employé. The same rule shall be applicable as to other than accident benefits for any one who shall have passed a satisfactory medical examination and in whose case there are no circumstances warranting the rejection of his application, and who shall meet with disablement or death before his application shall have been formally approved. In such cases contributions previously made will be retained, or the proper amounts will be deducted from wages earned, or from benefits payable if the wages payable be not sufficient. In other cases contributions made by those whose applications are not approved will be refunded.

44. Unless specially otherwise arranged with the Superintendent of the Relief Association, benefits will not be paid on account of accident, sickness or death occurring at any place beyond the jurisdiction of the United States,



or on account of sickness or death occurring to a member from epidemic disease of a dangerous character, at any place where such disease is known to prevail, and to which his duties as an employé in the Company's service, or in his family relations, do not require him to go, and contributions will be refunded which cover any time subsequent to the date upon which members, though on furlough, may go to such places.

45. Members will not be entitled to receive disablement benefits for time for which wages are paid them by the Company. In computing benefits, the time of disablement shall be taken as commencing upon the first day of the disablement upon which a full day's wages are not paid.

46. Benefits will not be paid for disability arising from sickness contracted and injuries received by members while intoxicated or off duty in consequence of intoxication, or from injuries received while engaged in unlawful acts; or for disease or death resulting from their immoralities or from the intemperate use of stimulants or narcotics; or for death by the hands of justice.

47. Benefits on account of continued disability will be paid monthly. When the amounts payable at the end of a month can be ascertained by the fifth of the succeeding month they will be paid not later than the twentieth of that month. Benefits for shorter periods of disablement will be paid at once on the amounts being ascertained.

48. Claims for death benefits will be payable within thirty days after the required evidence is furnished of their validity.

A part may be paid before the final settlement to meet funeral or other urgent expenses incident to the death of a member.

49. Benefits payable on account of disablement of a member by accident or sickness shall be payable only to the disabled member. Any such benefits remaining unpaid at the death of a member shall be paid to the person or persons entitled to receive the death benefit.

50. Members shall not be entitled to benefits who shall decline to permit a Medical Examiner, selected by the Association, to ascertain their condition while disabled, or who shall at such times absent themselves from home, and shall be from home, and shall be in places so distant that such Medical Examiner cannot be expected to visit them, unless satisfactory statements as to their condition shall be furnished by them, from reputable attending physicians.

#### *Miscellaneous.*

51. Death benefits will be paid by vouchers, which will be cashed by the Treasurer of the Association.

52. Should a member or his legal representative, or any other person authorized by law, bring suit against The Philadelphia and Reading Railroad Company, or against any other corporation which may at the time have its employes among the contributors to the Association, for damages on account of injury or death of such member, payment of benefits from the Relief Fund, on account of the same shall not be made until such suit is discontinued. If prosecuted to judgement or compromised, any payment of judgment or amount in compromise shall preclude any claim upon the Relief Association for such injury or death.

53. The Superintendent of the Relief Association is to be informed at once, in the manner provided, of accidents or sickness occurring to members.

54. Members who shall be absent from duty on account of sickness or injury must at once notify the person who keeps the record of their time, and they

will not be entitled to benefits for time previous to such notice, unless the delay shall have been unavoidable and the reason is stated.

55. Members must keep their foremen or time-keepers informed of their addresses and of any changes of the same.

56. The responsibility of the Relief Association to any member shall end when he ceases to be employed by the Company, excepting for benefits to the payment of which he shall have become previously entitled by reason of accident or sickness occurring while in the service.

57. When a member leaves the service he must surrender his Certificate of Membership to the person from whom he receives his final payment of wages.

58. The office of the Superintendent of the Relief Association, with the records thereof, shall be located at such point as shall from time to time be designated by the General Manager of The Philadelphia and Reading Railroad Company, either upon the lines of railroad owned or operate by the Company, or upon lines of railroad owned or operated by any company whose employés may become contributors to the Relief Association.

59. All questions of controversies of whatsoever character arising in any manner, or between any parties or persons in connection with the Relief Association, or the operation thereof, whether as to the construction of language or meaning of the Regulations of the same, or as to any writing, decision, instruction or acts in connection therewith; shall be submitted to the determination of the Superintendent of the Relief Association, whose decision shall be final and conclusive thereof, subject to the right of appeal to the Advisory Committee within thirty days after notice to the parties, interested, of the decision.

60. When an appeal is taken to the Advisory Committee it shall be heard by said Committee without further notice at their next stated meeting, or at such future meeting or time as they may designate, and shall be determined by vote of the majority of a quorum, or of any other number not less than a quorum of the members present at such meeting, and the decision arrived at thereon by the Advisory Committee shall be final and conclusive upon all parties without exception or appeal.

## BENEFICIAL FUND OF THE PHILADELPHIA AND READING COAL AND IRON COMPANY.

A beneficial fund also exists among the miners of the Philadelphia and Reading Coal and Iron Company, and the last report to the contributors of the fund may be given.

The Miners' and Laborers' Beneficial Fund was organized March 17, 1877, and since that date to November 30, 1890, the disbursements and receipts have been as follows:

Paid to contributors injured, . . . . .	\$445,223 95
Paid to families of contributors killed, . . . . .	204,200 29
	<hr/>
Total payments, . . . . .	\$649,424 24
Received from contributors, . . . . .	\$508,173 14
Received from interest on endowment fund, . . . . .	20,434 75
	<hr/>
Total receipts, . . . . .	\$528,607 89
	<hr/>
Deficiency, . . . . .	<u>\$120,816 35</u>

The payments in excess of the receipts for each year ending November 30, have been as follows:

1877 and 1878, . . . . .	\$5,311 40
1879, . . . . .	12,985 47
1880, . . . . .	9,595 29
1881, . . . . .	10,261 42
1882, . . . . .	11,006 08
1883, . . . . .	6,886 23
1884, . . . . .	6,297 02
1885, . . . . .	19,403 24
1886, . . . . .	13,571 31
1887, . . . . .	18,110 79
1888, . . . . .	17,847 12
1889, . . . . .	488 13
	<hr/>
1890, receipts in excess, . . . . .	10,947 15
	<hr/>
Total deficiency, . . . . .	<u>\$120,816 35</u>

This sum has been advanced by the Philadelphia and Reading Coal and Iron Company, from time to time, as required.

From the above it will be seen that the deficit has steadily increased from \$5,311.40, in 1878, to \$17,847.12, in 1888; and in order to make the fund self-sustaining it has been found necessary to increase the rate to be paid by contributors, which, on and after May 1, 1889, has been as follows:

First class, miners and skilled laborers, . . . . .	50 cents per month.
Second class, mechanics, . . . . .	40 cents per month.
Third class, ordinary laborers, . . . . .	30 cents per month.
Fourth class, old men and boys, . . . . .	15 cents per month.

In case of any accidental injury sustained by a contributor when actually engaged in the employ of the company, which incapacitates him from work, the party injured receives, during the period of such incapacity, the following sums: Those embraced in the first, second and third classes five dollars per week. Those in the fourth class two dollars per week. But no payment made for a longer period than six months, and the certificate of a reputable physician that the disability is the result of an accidental injury, such as is above described, must be furnished at the end of the month.

In case of death, directly resulting from any such accidental injury the following sums are paid:

On account of those of the first, second and third classes, thirty dollars in cash and seven dollars per week for one year.

On account of those of the fourth class, the sum of thirty dollars in cash and two dollars and eighty cents per week for one year.

The endowment of \$20,000, contributed by the company, is invested as follows:

Mammoth Vein Coal and Iron Company, first mortgage bonds, bearing 8 per cent. interest, . . . . .	\$10,000 00
Preston Coal and Improvement Company, first mortgage bonds, bearing 7 per cent. interest, . . . . .	10,000 00

The interest on the above bonds has been collected regularly as it matured, and paid over to the fund.

All expenses connected with the management of the fund are borne by the Philadelphia and Reading Coal and Iron Company.



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**REPORT OF THE FACTORY INSPECTOR.**

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## REPORT.

[Although the Bureau of Industrial Statistics exercises no supervision whatever over the factory inspector, he is required to report to the chief of that bureau. As there was no well-defined authority concerning the publication of his report, the Secretary of Internal Affairs addressed a letter to the Attorney General on the subject to which the following reply was received.

OFFICE OF THE ATTORNEY GENERAL,

HARRISBURG, PA., *June 9, 1891.*

HON. THOMAS J. STEWART, *Secretary of Internal Affairs:*

DEAR SIR: Answering your communication of June 2, and the several inquiries therein contained respecting the publication of the report of the factory inspector, I have to say:

1. "Is it the duty of the Secretary of Internal Affairs to publish said report?"

The act of May 11, 1874 (P. L. 135), "regulating the election of the Secretary of Internal Affairs, defining his duties and fixing his salary," enacts in section 4, \* \* \* \* \* his department shall embrace a Bureau of Industrial Statistics, the business of which shall be to impartially inquire into the relations of capital and labor, in their bearings upon the social, educational and industrial welfare of all classes of working people, and to offer practical suggestions for the improvement of the same.

The said bureau shall further collect, compile and *publish* such statistics in regard to the wages of labor and the social condition of the laboring classes as may enable the people of the state to judge how far legislation can be invoked to correct existing evils." \* \* \*

The provisions of the act as recited clearly establish the duty of the Secretary of Internal Affairs to publish "such statistics in regard to the wages of labor and the social condition of the laboring classes as may enable the people of the state to judge," etc.

The act of April 16, 1887 (P. L. 54), "To regulate the publication, binding and distribution of the public documents of this common-

wealth," provides, section VII, for the publication of "eight thousand six hundred and ten copies of the report of the Secretary of Internal Affairs on Industrial Statistics." \* \* \*

The act of May 20, 1889 (P. L. 243), entitled "An act to regulate the employment and provide for the safety of women and children in the mercantile industries and manufacturing establishments, and provide for the appointment of inspectors to enforce the same and other acts providing for the safety or regulating the employment of said persons," provides for the appointment of a factory inspector, and makes it his duty to "visit factories, workshops and other establishments in the state employing women and children, where the manufacture of goods is carried on, and to report to the Bureau of Labor Statistics of this state, on or before the thirtieth day of November of each year, the name of the factory, the number of such hands employed and the number of hours' work performed each week."

Of course, the meaning of this act is that the factory inspector shall make report to the Bureau of Industrial Statistics. The law directs that the factory inspector shall make report to the Bureau of Industrial Statistics, which is part of the department of Internal Affairs. The act of 1887 provides for the publication of the reports of the Secretary of Internal Affairs on industrial statistics. It follows inevitably that the report of the factory inspector should be included in and made a part of the report of the Secretary of Internal Affairs, the publication of which is explicitly provided for by law; and there is no provision of law for its publication as a separate part.

This conclusion renders unnecessary any reply to the inquiry as to the style of publication and the number of copies.

Very truly yours,

W. U. HENSEL,  
*Attorney General.*

The report of the factory inspector therefore appears herewith in accordance with the foregoing opinion.—CHIEF OF BUREAU OF INDUSTRIAL STATISTICS.]

OFFICE OF FACTORY INSPECTOR,

HARRISBURG, *December 1, 1890.*

HON. ALBERT S. BOLLES, *Chief of the Bureau of Industrial Statistics,*  
*Harrisburg, Pa.:*

DEAR SIR: Section five of an act to regulate the employment and provide for the safety of women and children in mercantile industries and manufacturing establishments, and to provide for the appointment of inspectors to enforce the same, and other acts providing for the safety and regulating the employment of said persons, approved the 20th day of May, A. D. 1889, provides that the report shall be made to the Bureau of Labor Statistics, but on making an examination of the laws I find



that the Bureau of Labor Statistics has been abolished, and that the Bureau of Industrial Statistics, over which you have control, was created to fill the vacancy. That there might be no mistake as to whom I should make my report, I addressed the following communication to the Attorney General for a ruling in the case:

HARRISBURG, PA., *November 11, 1890.*

Hon. WM. S. KIRKPATRICK, *Attorney General:*

DEAR SIR: Section five of an act approved the 20th day of May, 1889, known as the factory act, makes it my duty to report the work that has been performed by this department to the Bureau of Labor Statistics of this state on or before the 30th of November of each year. On making an examination of the laws I find that the Bureau of Labor Statistics was abolished by act of May 11, 1874 (P. L. 135). To whom shall I make my report, and what are the provisions made for the publication of a report by this department?

Very truly,

WM. H. MARTIN,  
*Factory Inspector.*

OFFICE OF ATTORNEY GENERAL,

HARRISBURG, *November 25, 1890.*

Hon. WM. H. MARTIN, *Factory Inspector:*

DEAR SIR: In a recent communication you call my attention to the fifth section of the act of May 20, 1889 (P. L. 243), wherein, among other things, it is the duty of the factory inspector "to report to the Bureau of Labor Statistics of this state, on or before the 30th day of November of each year, the name of the factory, the number of such hands employed, and the number of hours of work performed each week." You desire to be advised as to whom you shall make your report, and what provision is made for the publication thereof.

In reply, I would say that I am of the opinion that the report required by the fifth section of the said act must be made to the Bureau of Industrial Statistics. It is true that by the act of May 11, 1874 (P. L. 135), the act of April 12, 1872, providing "for the establishment of a bureau of statistics on the the subject of labor," etc., is repealed, but the act of 1874 provides for the establishment of a Bureau of Industrial Statistics which was designed to take the place of the bureau provided for by the repealed act. The Bureau of Industrial Statistics, therefore, is the only department to which the factory act of 1889 could possibly refer, and the nature of the information required to be embodied in the report clearly indicates that such is intended to be its destination.

In reply to your second inquiry I have to say that there is no pro-

vision in the laws of this state for the publication of a report by the factory inspector as a separate document. It can on only be published in connection with and as a part of the report of the Secretary of Internal Affairs on Industrial Statistics.

Very respectfully yours,

W. S. KIRKPATRICK,  
*Attorney General.*

In accordance with the above I respectfully submit to you this my first annual report.

After my appointment I made a visit to the States of New York and Massachusetts for the purpose of making an investigation into the workings of the inspection laws of those states. Through the courtesy of Mr. James Connolly and Mr. Rufus R. Wade, the factory inspectors of their respective states, much valuable information was gathered that assisted me very much in the organization of this department. I feel that I am under great obligations to the above-named gentlemen for the many favors shown while on this tour of inspection.

On my return I located my office and made my first appointment, December 5, 1889, in the person of Miss Mary Wagner, of Harrisburg, as deputy inspector. Miss Wagner was assigned to the clerical work of the office, a position she has filled very creditably.

The work of getting out forms for blanks, and having the same printed, consumed considerable time. The blanks number from one to twenty-three, 180,000 of these forms have been printed for the use of the department. Copies of the law with the required blanks were mailed to the address of as many of our manufacturers as we were able to locate, over 7,000 in all.

In submitting this report of the work done by this department, it seems proper to call your attention to this being the first effort to enforce a law of this nature in our state, and consequently the officers whose duty it was to see that the law was put in force were new to the work required of them.

For that and many other reasons I deemed it important that I should go very cautiously about the work to be performed, so that I may say the first year has been one in which I have tried to educate not only myself, but the deputy inspectors, in the duties required of the department under the law.

A very important duty was to district the state. Section thirteen of the act which provides that one-half of the deputies appointed shall be females, made this work more difficult than it would have been had there been no female deputies.

After giving this matter due consideration I concluded to apportion the state into three districts, taking the present military divisions as my guide, and appoint one male and one female inspector in each district,

dividing the work between them as seemed best for the service, giving to the female inspector the mercantile industries and such manufacturing establishments as use light machinery, and employ large proportions of women and children, while to the male inspector was assigned the establishments in which heavy machinery is in use, as well as those places where men and boys are principally employed.

This division, while it has its disadvantages, seems to be the best that can be made, the principal objections being the extended territory allotted to each deputy, making it more difficult to have that supervision over their work than they would have if it were more contracted.

The districts beginning with Philadelphia and surrounding counties being designated as No. 1. The Central district as No. 2. The Western district as No. 3. The deputy inspectors were appointed in the following order: Miss Mary Wagner, December 5, 1889; Mr. Wm. H. Lewis, January 6, 1890; Mr. Wesley S. Godfrey, January 7, 1890; Mr. M. N. Baker, February 20, 1890; Mrs. Belle McEnery, February 23, 1890; Mrs. Nan Y. Leslie, March 12, 1890.

Mr. Godfrey and Mrs. McEnery were assigned for duty in district No. 1. Mr. Lewis and Miss Wagner for the second and Mr. Baker and Mrs. Leslie for the third.

After a few months service Mr. Lewis was taken sick and after a lingering illness death relieved him of his sufferings. In the death of Mr. Lewis I feel that this department sustained a great loss. I have no hesitation in saying that, with experience, Mr. Lewis would have made one of our best inspectors. On September 23, Mr. John F. Little, of Lancaster, was appointed to fill the vacancy caused by the death of Mr. Lewis.

The legislature that enacted the law creating the department failed to make an appropriation to make it effective, with the exception of the salaries of the deputy inspectors.

As a consequence the said inspectors have had to pay their traveling, hotel and other expenses out of their private funds, while for the factory inspector no appropriation for either salary or expenses was made. As a consequence the department is patiently awaiting the convening of the legislature, trusting that an early appropriation will be made to cover the above deficiencies.

The deputy inspectors, by their experience, as time goes on, are becoming more efficient in the onerous and exacting work required of them, in the enforcement of the law. I take this occasion to acknowledge their services and intelligent efforts in that direction.

The duties of an inspector are not only very important, but exacting, requiring good judgment in giving orders for necessary changes to be made, so that employes may receive the full benefit intended by the law, at the same time avoiding all unnecessary expenditures of money by the employers.



I feel that a great amount of good has already been accomplished as the following summary of inspections, with the large number of orders given and complied with, will show:

SUMMARY OF WORK DONE BY THE DEPARTMENT FROM ORGANIZATION TO  
NOVEMBER 30, 1890.

Number of deputy inspectors on inspection work, . . . . .	5
Total number of inspections made, . . . . .	2, 087
Number of males employed where inspections have been made, . . . . .	181, 297
Number of females employed where inspections have been made. . . . .	116, 422
Number between twelve and sixteen years of age, . . . . .	30, 437
Number of children under twelve years of age found employed and discharged, . . . . .	264
Total number of employés in establishments that have been inspected, . . . . .	297, 719
Total number of orders given, . . . . .	782
As follows: Fire escapes to be erected, . . . . .	40
Elevators to be guarded, . . . . .	113
Sanitary orders given, . . . . .	110
Miscellaneous, . . . . .	519
Orders reported as complied with, . . . . .	531
Number of accidents reported, . . . . .	177

As a general thing we have been kindly received by the merchants and manufacturers where inspections have been made, and a willingness has been shown to comply with the law, that convinces me that it is only a question of a short time when the proprietors of the workshops and mercantile industries of the state will give full allegiance to the factory laws.

In the performance of this work I take pleasure in saying that we have not been compelled to take a single case into court and but two arrests have been made. The first was a case where a manufacturer of neckwear refused admission to his establishment for the purpose of allowing an inspection to be made. The offender in this instance, after being given time to fully consider his case, concluded that it would be better for him to make terms by paying the magistrate's fees and permitting the inspection to be made. Mrs. McEnery in making the inspection found a very well-conducted establishment, but lacking in one important requirement, that of sufficient means of egress in case of fire.

A fire escape was ordered, and it was erected within the time specified by law. The second case was a firm in the city of Pittsburgh engaged in the manufacture of glass. The charges were for employing children



under twelve years of age, and a general violation of sections two and three. This case has not yet reached the courts, but when the trial comes off we have no doubt of our being able to convict on all the counts in the bill of indictment.\*

We have received during the year a large number of complaints against manufacturers for violations of the law; these charges generally have reached us in the shape of anonymous letters; this is accounted for by the fact that many employes are afraid that if their names were made known to their employer they would lose their situations.

If parties having complaints to make would give their true names and addresses, it would assist us very much in making a full and thorough investigation, as many investigations fail for want of some information that might be furnished by the parties making the complaint. We can assure those making complaints that there is no danger of their identity being revealed, as we hold all such information in strict confidence. We have, nevertheless, investigated all charges made, as far as we could. In many cases there has been good foundation for the charges made, and in all such cases the cause of complaint has been remedied, but in the majority of cases the law has been misconstrued, the complainants thinking that all mercantile and manufacturing establishments come under its provisions.

Very unfortunately this is not the case. Section four of the act exempts all industries employing less than ten persons who are women and children, and I can safely say that a majority of the complaints come from those small places over which we have no control. One of the principal causes of complaint is a violation of section one of the act, which prohibits the employment of minors for more than sixty hours per week. Employers in putting their own construction on this section, have made it apply only to children under sixteen years of age. In this they are entirely at fault. In that, as in all other cases where the meaning or intention of the law has been questioned, I have at once submitted the disputed question to the Attorney General.

For the purpose of securing a ruling on the meaning of the word "children" as applied in the act, I addressed the following communication to that official.

OFFICE OF FACTORY INSPECTOR,  
HARRISBURG, *February 7, 1890.*

HON. WM. S. KIRKPATRICK, *Attorney General:*

DEAR SIR: The fourth section of the factory inspection law of 1889 (P. L. 243) provides that "no person, firm or corporation employing

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\* This case has since been tried and the offending firm was convicted, thus sustaining the action of the department.

less than ten persons who are women and children shall be deemed a factory, manufactory or mercantile establishment within the meaning of this act." A question has arisen as to the meaning of the word "children," as employed in this section. Does the word include persons under the age of twenty-one years, or does the section refer to the use of the term "child," as employed in section two and three where children under twelve and children under sixteen years of age are employed? In short, does the term "children," in section four, refer to persons under twenty-one, to persons under sixteen, or to persons under twelve years of age.

Very truly,

W. H. MARTIN,  
*Factory Inspector.*

OFFICE OF ATTORNEY GENERAL,  
HARRISBURG, *March 12, 1890.*

HON. WILLIAM H. MARTIN, *Factory Inspector, Harrisburg, Pa.:*

DEAR SIR: I have the honor to acknowledge your communication of the 7th ult., wherein you submit the question whether the word children employed in section four of the factory inspection law of 1889 (P. L. 243) includes persons under the age of twenty-one years or whether it refers only to persons under sixteen years of age.

The section referred to provides that "No person, firm or corporation employing less than ten persons, who are women or children, shall be deemed a factory, manufacturing or mercantile establishment within the meaning of this act."

In construing this section, little aid can be derived from a consideration of the ordinary meaning of the words child or children as used in common speech, or from the general definitions of the law of these terms. Strictly they are correlative with the term parent. They include the living offspring of human parents before or after birth, and without limit as to age.

Legally, the terms are usually confined to descendants in the first degree of either sex, born in lawful wedlock of human parents.

It has been held, for example, that within the legal definitions of the term, in various applications of it, bastards are not children; that grandchildren are not children; and in the construction of wills, the term children has sometimes been held not to include stepchildren or adopted children.

The statute of Elizabeth, making children liable for the maintenance of their poor parents, has been construed to apply not to grandchildren. The term child, in other legal applications, has been held to apply to persons under the age of puberty.

These suggestions are made for the purpose of showing that the terms child or children, used in the factory act, cannot be construed with reference merely to common usage or ordinary legal definition. There is no general and definite legal limit to the age of childhood. A child may have rights before its birth, and, whatever its age, it never ceases to be a child of its parents.

We must then look into the legislation of the state in relation to the present subject matter and construe the terms with reference to their peculiar use in this act, and in the light of the legislation of other states and countries where similar enactments have been made.

The first section enacts that no minor shall be employed longer than sixty hours in any week. Here it is clear that a person under twenty-one years of age is intended. The second section prohibits the employment in any factory of any child under twelve years of age, and this and the following section regulate the employment of children under sixteen years of age. The seventeenth section makes it a misdemeanor in any person to violate any of the provisions of the act, or to suffer or permit any child or female to be employed in violation of its provisions.

In view of this penal clause, which does not define the term child with reference to the age of the person intended, and of the fourth section which excludes such persons, firms or corporations as employ less than ten persons, who are women or children, from the operation of the act, the importance of a definite construction of the term child is apparent.

Besides the section quoted, we find that the eighth section uses the term minor under sixteen years of age. By its title we find that the purpose of the act is to regulate the employment and provide for the safety of women and children in mercantile industries and manufacturing establishments, and to provide for the appointment of inspectors to enforce the same and other acts providing for the safety or regulating the employment of such persons.

From a consideration of the general scope and purpose of the act, and the manner in which the terms "child" and "children" are employed in it, I am of the opinion that the term children in the fourth section embraces such persons who can be legally employed in a factory, manufacturing or mercantile establishment, and are under sixteen years of age.

This construction is confirmed by a consideration of the legislation of other states and countries upon this subject. I have had the opportunity of examining the factory laws of Massachusetts, New Jersey, Ohio, Wisconsin, Connecticut, Maine, the Province of Ontario, Great Britain, France and Germany. These are frequently referred to as laws regulating the employment of child labor, and many of them, more elaborate in detail than the factory act of May 20, 1889, expressly define the terms employed.

For example, the factory and workshop act of 1878 of Great Britain



defines the term child to mean a child under fourteen years; young person, a person of the age of fourteen and under the age of eighteen. The act of the Province of Ontario defines the word child to mean a person under the age of fourteen; young girl, a girl of the age of fourteen and under eighteen. The factory law of Germany defines the term young person to apply to persons between the ages of fourteen and sixteen. The Massachusetts law defines the term child to mean a person under the age of fourteen years, and the expression young person to mean a person of the age of fourteen years and under the age of eighteen years.

Without going further into the details of the various laws referred to relating to this subject, it may be stated, in general terms, that, as a rule, they prohibit the employment of children under a certain age, usually twelve or thirteen, in any mechanical, mercantile or manufacturing establishment. They then regulate the employment of children between twelve or thirteen and sixteen or eighteen years of age with more or less particularity and strictness, and in a manner in general, similar to that in which the employment of children under sixteen years of age is regulated in the factory act of May 20, 1889. All of this legislation employs the terms child or children in the same general manner, sometimes with and sometimes without an express and exact definition, but always so as to show that persons of a certain age, under that of years of discretion, are intended, and to show that the limit of age, named in the various laws, of fourteen, sixteen or eighteen years, is the limit of the age of childhood within their meaning. In the act of May 20, 1889, this limit, as before stated, is sixteen years.

Respectfully yours,

JOHN F. SANDERSON,  
*Deputy Attorney General.*

#### AN ACT

To regulate the employment and provide for the safety of women and children in mercantile industries and manufacturing establishments, and to provide for the appointment of inspectors to enforce the same, and other acts providing for the safety or regulating the employment of said persons.

SECTION 1. *Be it enacted, etc.,* That no minor shall be employed at labor in factories or any manufacturing establishments or mercantile industry in this state, for a longer period than sixty hours in any week, unless for the purpose of making necessary repairs.

SECTION 2. No child under twelve years of age shall be employed in any factory, manufacturing or mercantile establishment within this state. It shall be the duty of every person so employing children to keep a register, in which shall be recorded the name, birthplace, age and place of residence of every person so employed by him under the



age of sixteen years. And it shall be unlawful for any factory, manufacturing or mercantile establishment to hire or employ any child under the age of sixteen years, without there is first provided and placed on file an affidavit made by the parent or guardian, stating the age, date and place of birth of said child. If said child have no parent or guardian then such affidavit shall be made by the child, which affidavit shall be kept on file by the employer, and which said register and affidavit shall be produced for inspection on demand by the inspector or any of the deputies appointed under this act.

SECTION 3. Every person, firm or corporation employing women or children or either in any factory, manufacturing or mercantile establishment, shall post and keep posted in a conspicuous place in every room where such help is employed, a printed notice stating the number of hours per day for each day of the week required of such persons, and in every room where children under sixteen years of age are employed a list of their names with their age.

SECTION 4. No person, firm or corporation employing less than ten persons, who are women or children, shall be deemed a factory, manufacturing or mercantile establishment within the meaning of this act.

SECTION 5. The Governor shall, immediately after the passage of this act, appoint, with the advice and consent of the Senate, a factory inspector at a salary of fifteen hundred dollars per year, whose term of office shall be three years. The said inspector shall be empowered to visit and inspect, at all reasonable hours and as often as practicable, the factories, workshops and other establishments in the state employing women or children, where the manufacture of goods is carried on, and to report to the Bureau of Labor Statistics of the state, on or before the thirtieth day of November of each year, the name of the factory, the number of such hands employed and the number of hours work performed each week. It shall also be the duties of said inspector to enforce the provisions of this act and to prosecute all violations of the same before any magistrate or any court of competent jurisdiction in the state.

SECTION 6. All necessary expenses incurred by said inspector in the discharge of his duty shall be paid from the funds of the state upon the presentation of proper vouchers for the same: *Provided*, That not more than twenty-five hundred dollars shall be expended by him therefor in any one year.

SECTION 7. It shall be the duty of the owner, agent or lessee of any such factory, manufacturing or mercantile establishment, where hoisting-shafts or well-holes are used, to cause the same to be properly and substantially enclosed or secured if in the opinion of the inspector it is necessary to protect the life or limbs of those employed in such establishments. It shall be the duty of the owners, agent or lessee to provide or cause to be provided such proper trap or automatic doors, so

fastened in or at all elevator ways as to form a substantial surface when closed, and so constructed as to open and close by action of the elevator in its passage either ascending or descending.

SECTION 8. It shall also be the duty of the owner of such factory, mercantile industry or manufacturing establishment, or his agent, superintendent or other person in charge of the same, to furnish and supply or cause to be furnished and supplied, in the discretion of the inspector, where dangerous machinery is in use, automatic shifters or other mechanical contrivances for the purpose of throwing on or off belts on pulleys. And no minor under sixteen years of age shall be allowed to clean machinery while in motion. All gearing and belting shall be provided with proper safeguard.

SECTION 9. It shall be the duty of the owner or superintendent to report in writing, to the factory inspector, all fatal accidents or serious injury done to any person employed in such factory, within forty-eight hours, stating as fully as possible the cause of such injury.

SECTION 10. A suitable and proper wash room and water closets shall be provided for females where employed, and the water closets used by females shall be separate and apart from those used by males, and shall be properly screened and ventilated and at all times kept in a clean condition.

SECTION 11. Not less than forty-five minutes shall be allowed for the noon-day meal in any manufacturing establishment in this state. The factory inspector, his assistant or any of his deputies shall have power to issue permits in special cases, allowing a shorter meal time at noon, and such permit must be conspicuously posted in the main entrance of the establishment, and such permit may be revoked at any time the inspector deems necessary, and shall only be given where good cause can be shown.

SECTION 12. That if the inspector of factories find that the heating, lighting, ventilation or sanitary arrangement of any shop or factory is such as to be injurious to the health of persons employed therein, or that the means of egress in case of fire or other disaster is not sufficient or in accordance with all the requirements of law, or that the belting, shafting, gearing, elevators, drums and machinery in shops and factories are located so as to be dangerous to employes, and not sufficiently guarded, or that the vats, pans or structures filled with molten metal or hot liquid are not surrounded with proper safeguards for preventing accident or injury to those employed at or near them, he shall notify the proprietor of such factory or workshop to make the alterations or additions necessary within sixty days, and if such alterations or additions are not made within sixty days from the date of such notice, or within such time as said alterations can be made with proper diligence upon the part of said proprietors, said proprietors or agents shall be deemed guilty of violating the provisions of this act.

SECTION 13. The factory inspector now or hereafter appointed under and by virtue of the provisions of this law, is hereby authorized to appoint such number of persons as in his judgment may be necessary, not exceeding six, one-half of whom shall be females, who shall be known as deputy factory inspectors, either or any one of whom may be appointed to act as clerk in the main office, and whose duties it shall be to enforce the provisions of this act and of the several acts relating to factories and manufacturing establishments. The powers of said deputies shall be the same as the powers of the factory inspector, subject to the supervision and direction of the factory inspector.

SECTION 14. The traveling expenses of each of said deputies shall be approved by the inspector and audited by the Auditor General of the state before payment, and said deputy inspectors shall have an annual salary of one thousand dollars, to be paid monthly by the treasurer of the state out of any moneys not otherwise appropriated.

SECTION 15. Said factory inspector shall have power to divide the state into districts and to assign one of said deputies to each district, and may transfer any of the deputies to other districts in case the best interests of the state require it. The inspector shall have the power of removing any of the deputy inspectors at any time.

SECTION 16. An office shall be furnished in the capitol as soon as practicable, which shall be set apart for the use of the factory inspector. The factory inspector and his deputies shall have the same power to administer oaths or affirmations as is now given to notaries public, in cases where persons desire to verify documents connected with the proper enforcement of this act.

SECTION 17. Any person who violates any of the provisions of this act, or who suffers or permits any child or females to be employed in violation of its provisions, shall be deemed guilty of a misdemeanor, and on conviction shall be punished by a fine of not more than five hundred dollars.

SECTION 18. A printed copy of this act shall be posted by the inspector in each work-room of every factory, manufacturing or mercantile house where persons are employed who are affected by the provisions of this act.

SECTION 19. All acts or parts of acts inconsistent with the provisions of this act are hereby repealed.

APPROVED—The 20th day of May, A. D. 1889.

JAMES A. BEAVER.

The law should receive the early attention of the legislature, as in my judgment it is important that it should be amended in a number of instances; among the most important changes I would class the following:

Section one, which prevents the employment of minors for more than sixty hours per week, should be amended to include all females without



reference to age. Provision should also be made in this section by which the hours of labor could be increased to say, seventy-two hours per week for a limited time, not to exceed two or three weeks in any one year.

This privilege would meet the wants of the mercantile establishments during the holiday seasons when it seems to be impossible to meet the demands made upon them by the public, in the usual hours of employment. I feel that this extension of time would meet the approval of the employés of these establishments, as the extra time could be paid for, while these same establishments during the summer season when business is dull, allow considerable time for recreation.

Among the many other industries that would be much benefited by this provision I might name the manufacturing of confectionery, as the demands made on them for a short time previous to the holiday season is so great, that even by running their factories up to their full capacity, the requirements of the trade cannot be satisfied at this season of the year, except by granting some concession similar to the above, and as the products are mostly of a perishable nature, they cannot be made in advance of the time when they are to be placed upon the market; this privilege would relieve them very much.

The twelfth section of the act provides that where the means of egress in case of fire or other disaster is not sufficient or in accordance with all the requirements of the law, it shall be my duty to notify the proprietors of such a factory or workshop to make the necessary alterations or additions within sixty days.

It was contended by many friends of the factory act, that this made it our duty to enforce the fire-escape law of June 2, 1885, with the supplement to the same law and of the same date. That there should be no doubt as to our duty in this particular, the question was submitted to the Attorney General in the following communication :

OFFICE OF THE FACTORY INSPECTOR,  
HARRISBURG, PA., *November 12, 1890.*

Hon. W. S. KIRKPATRICK, *Attorney General, Harrisburg, Pa :*

DEAR SIR: Inviting your attention to the acts of June 3, 1885 (P. L. 1885, pp. 65-68), and to the factory law of May 20, 1889 (P. L. 1889, p. 243), I have the honor to request that you advise me as to the duty of the factory inspector with reference to the subject of fire-escapes.

Among the other matters committed to the jurisdiction of the factory inspector by the act of 1889, I have given attention to the means of egress in case of fire or other disaster, existing in the establishments I have inspected, and in particular cases have taken such action as I thought was proper.



In the prosecution of this work a question has arisen as to what authority was vested in me to require the erection of free-escapes where none were provided, and to require the erection of additional fire-escapes where, in a given case, some were already erected, or in such case to require the alteration, repair or placing in different position of existing escapes.

I have been furnished by persons interested in the subject with lists of factories alleged to be provided with insufficient escapes, or with escapes not complying in the manner of their erection, or with reference to appliances required with existing law. Upon examination of the lists I have ascertained that most of the establishments designated are such as employ less than ten persons who are women and children. Nevertheless it is contended by those with whom I have been in communication, that as to such, it is my duty to enforce the erection of such escapes as are required by the fire-escape laws of 1885, to which I have referred, and to enforce those laws by becoming the prosecutor of delinquents.

In advising me on this subject will you kindly cover the points suggested by the matters I have stated.

Very truly,

W. H. MARTIN,  
*Factory Inspector.*

OFFICE OF ATTORNEY GENERAL,  
HARRISBURG, *November 12, 1870.*

HON. WILLIAM H. MARTIN, *Factory Inspector, Harrisburg, Pa.:*

DEAR SIR: I have the honor to acknowledge receipt of your communication of this date, requesting my opinion as to your duties under the factory law of May 20, 1889 (P. L. 243).

This act, in section fourth, provides that "No person, firm or corporation employing less than ten persons, who are women or children, shall be deemed a factory, manufacturing or mercantile establishment within the meaning of this act." This section, in my opinion, clearly limits your authority, in the exercise of your jurisdiction, to factories, manufactories or mercantile establishments employing more than ten persons, who are women and children. It follows, therefore, that such factories as employ a less number are not within your jurisdiction, and you have no official authority with reference to the subject of fire-escapes or means of egress in case of fire or other disaster pertaining to such establishments.

The fire-escape laws of 1885 apply to every building used as a seminary, college, academy, hospital, asylum or hotel; every storehouse, factory, manufactory or workshop; every tenement or lodging house,

public hall, school building, etc., more than two or three stories in height. They require the provision of fire-escapes and other designated appliances, provide penalties for non-compliance with requirements of law, and for the inspection of escapes and other appliances by the board of fire commissioners or fire marshal or county commissioners as the case may be. These authorities, acting within their respective jurisdictions, have power to give certificates, the effect of which is to protect the parties to whom such certificates are granted from liability under the law.

By section twelve of the factory law you are charged with the supervision of heating, lighting, ventilation, sanitary arrangements, "means of egress in case of fire or other disaster, in case the same are not sufficient or in accordance with all the requirements of law," together with other matters particularly specified, and with reference to these you are required to notify the proprietor of a factory or workshop to make alterations or additions required in order to secure the health and safety of persons employed.

A comparison of the provisions of these laws suggests the following considerations:

1. That the fire-escape acts contain within themselves complete provisions for their due enforcement. Any violation of them, or neglect to comply with their provisions, may be punished, and any person competent to prosecute an offender for a crime may, by complaint, institute in the ordinary way the usual criminal process provided for the enforcement of the laws.

2. The fire-escape laws include many classes of buildings other than factories or mercantile establishments.

3. Your jurisdiction is confined, as before stated, to such factories or mercantile establishments as employ more than ten persons, who are women and children.

4. The fire-escape acts commit to proper authority the subject of the efficiency of escapes and appliances with reference to all buildings within the scope of those laws.

In my opinion, the factory law does not create a jurisdiction in any wise conflicting with the jurisdiction granted by the fire-escape acts to the board of fire commissioners, fire marshal and county commissioners, and where, in a given case, you inspect an establishment within your jurisdiction, the proprietor of which is furnished with a certificate granted by the proper authority, that certificate is conclusive upon you that such person has complied with the requirements of law with reference to fire-escapes; and in such case you have, therefore, no authority to require the alteration of such escapes, either in manner of construction, or with reference to the position in which they may be placed; nor have you authority to require the erection of additional escapes. If such escapes are out of repair, or lacking in their original completeness,

as they existed when the certificate was granted, it then becomes your duty to require their repair or restoration.

If, in a given case, an establishment within your jurisdiction has escapes which have not been examined and pronounced sufficient by the proper authority, or is wholly unprovided with fire-escapes, it then becomes your duty to notify the proprietor that he is required, within sixty days, to conform to the requirements of law with reference to fire-escapes. This conformity will be complete when the party has secured the certificate of the proper authority as to the sufficiency of the escapes created before or in consequence of your notice.

To avoid misapprehension, I think it proper to remark that the terms "means of egress in case of fire or other disaster" are more comprehensive than the term of "fire-escape." These "means of egress" include the interior means which may exist, such as stairways, corridors, the manner in which rooms communicate or doors open, and other such details of interior construction. In examining these, it becomes your duty to ascertain whether they are such as to facilitate or hinder the prompt and safe evacuation of the establishment in case of fire or other disaster.

Respectfully yours,

W. S. KIRKPATRICK,  
*Attorney General.*

This is a very interesting subject, but as there are no provisions made for the publication of my report except it be that named by the Attorney General, and as I am aware that it would be impossible for you to include a report with your own that would do justice to this department I will now close.

The following are the inspections made. I also hand you a list of the accidents reported for the year.

The reason for so many accidents being reported from some of the large industrial establishments and so few, or none at all, from others can be accounted for in two ways. First, the totally inadequate number of deputy inspectors provided for by the act, only two being allowed for the great manufacturing city of Philadelphia and the adjoining counties of Chester, Delaware, Montgomery and Bucks, and secondly, the indifference or indisposition of the proprietors or superintendents of manufacturing establishments to comply with the provisions of the law creating the Factory Inspectors, section 9 of which is as follows: "It shall be the duty of the owner or superintendent to report in writing to the Factory Inspector all fatal accidents or serious injury done to any person employed in such factory, within forty-eight hours, stating as fully as possible the cause of such injury." And while some of the large

employers of labor have shown a disposition to comply with the law in every respect, others who employ large numbers of people and where, consequently, frequent accidents have occurred, have ignored the law by making no report of them whatever.

Very truly,

W. H. MARTIN,  
*Factory Inspector.*



## FACTORY INSPECTION DISTRICTS.

## FIRST DISTRICT.

Counties of Bucks, Chester, Delaware, Montgomery, Philadelphia; 10,064 manufacturing establishments; 1,151,902 population; 2,167 square miles.\*

*Deputy Inspectors*—Mr. Wesley S. Godfrey, 2350 East Huntingdon street, Philadelphia; Mrs. Belle McEnery, N. W. corner Twenty-second and Norris streets, Philadelphia.

## SECOND DISTRICT.

Counties of Adams, Berks, Bradford, Carbon, Clinton, Columbia, Cumberland, Dauphin, Franklin, Lancaster, Lebanon, Lackawanna, Lehigh, Luzerne, Lycoming, Montour, Northumberland, Northampton, Perry, Pike, Potter, Schuylkill, Snyder, Susquehanna, Sullivan, Tioga, Union, Wayne, Wyoming, York; 6,643 manufacturing establishments; 1,605,324 population. 20,101 square miles.

*Deputy Inspectors*—Mr. John F. Little, 28 Laurel street, Lancaster; Miss Mary A. Wagner, 216 North Second street, Harrisburg.

## THIRD DISTRICT.

Counties of Allegheny, Armstrong, Beaver, Bedford, Blair, Butler, Cambria, Cameron, Centre, Clarion, Clearfield, Crawford, Elk, Erie, Fayette, Forest, Fulton, Green, Huntingdon, Indiana, Jefferson, Juniata, Lawrence, Mercer, Mifflin, McKean, Somerset, Venango, Warren, Washington, Westmoreland; 5,093 manufacturing establishments; 1,522,165 population; 22,813 square miles.

*Deputy Inspectors*—Mr. M. N. Baker, Corry; Mrs. Nan Y. Leslie, Titusville, Pa.

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\* NOTE.—The figures given are taken from the United States census of 1880, being the last official figures available.

This number of manufactories has been very largely increased during the last ten years. A very large majority of these establishments will not be subject to inspection as the list embraces every conceivable kind of manufacturing establishments.

## ACCIDENTS—FIRST DISTRICT—

NAME.	Age—Years.	Residence.	Name of employer.
S. Hartzel, . . . . .	19, .	163 Green Lane, Philadelphia. . .	Burnham, Parry, Williams & Co.
John McKinney, . . . . .	29, .	9 Kendrick street, Philadelphia. .	do. do.
R. Crilley, . . . . .	27, .	2111 Nicholas street, Philadelphia, .	do. do.
James Collins, . . . . .	30, .	1723 Carlton street, Philadelphia, .	do. do.
Thomas Cummings, . . . . .	41, .	1545 Ridge avenue, Philadelphia. .	do. do.
P. R. Robbins, . . . . .	41, .	1619 N. Twenty-first street, Phila..	do. do.
M. Fannon, . . . . .	19, .	2111 Callowhill st., Philadelphia, .	do. do.
Barney McGlone, . . . . .	45, .	1917 Croskey street, . . . . .	do. do.
Joseph Hubbard, . . . . .	16, .	2833 Edgemont street, Phila., . .	Schliehter Jute Cordage Co., .
Charles S. Cook, . . . . .	13, .	2844 North Eleventh street, Phila., .	Craven & Dearnly, . . . . .
Robert Howett, . . . . .	26, .	4000 Kensington avenue, Phila., .	Thomas Hervey & Sons, . . . .
Walter W. Spencer, . . . . .	15, .	4043 Germantown avenue, Phila., .	McCallum & Sloan, . . . . .
John Kemp, . . . . .	56, .	2015 Diekinson street, Philadelphia, .	Burnham, Parry, Williams & Co.
Thomas Dunlevy, . . . . .	32, .	1809 Tetlow street, Philadelphia, .	do do.
Joseph Birbeek, . . . . .	25, .	325 N. Nineteenth street, Phila., .	do. do.
Frank Boyer, . . . . .	32, .	Collingdale, Delaware county, . .	do. do.
Anthony Heenan, . . . . .	27, .	1822 Rhoads street, Philadelphia. .	do do.
Mame Williams, . . . . .	17, .	2708 Germantown avenue, Phila., .	Craven & Dearnly, . . . . .
Martin Cunningham, . . . . .	24, .	1222 Potts street, Philadelphia. . .	Burnham, Parry, Williams & Co.
Fred. Worster, . . . . .	18, .	York street, Philadelphia, . . . .	Stinson Bros. & Kurlbaum, . .
James Kearney, . . . . .	29, .	1239 Ashland street, Philadelphia, .	Burnham, Parry, Williams & Co.
Thomas Riley, . . . . .	25, .	1830 Callowhill street, Phila., . .	do. do.
Thomas Harding, . . . . .	32, .	1112 Green street, Philadelphia, . .	do. do.
Patriek Sheridan, . . . . .	22, .	739 South Thirteenth st., Phila., .	do. do.
Patrick Donovan, . . . . .	27, .	1822 Rhoades street, Philadelphia, .	do. do.
Mary McLaughlin, . . . . .	15, .	1310 Adrian street, Philadelphia, .	S. C. Wilson Co., . . . . .
Robert Warson, . . . . .	36, .	1517 Carlton street, Philadelphia, .	Burnham, Parry, Williams & Co.
Emil Eger, . . . . .	16, .	Camden, New Jersey, . . . . .	do. do.
William H. Mullin, . . . . .	39, .	2144 Lawrence street, Philadelphia, .	Craven & Dearnly, . . . . .
William McLaughlin, . . . . .	16, .	1435 Marseilles Place, Philadelphia, .	Burnham, Parry, Williams & Co.
James Larkins, . . . . .	22, .	443 North Thirteenth street, Phila., .	do. do.
Thomes Murphy, . . . . .	24, .	1419 Edmond street, Philadelphia, .	do. do.
Daniel Pryor, . . . . .	26, .	306 N. Nineteenth street, Phila., .	do. do.
Edward Sipe, . . . . .	14, .	1214 Crease street, Philadclphia, .	William Thomson & Co., . . . .
William Clark, . . . . .	11, .	Chester, Delaware county, . . . .	Lilley & Sons Man'g Company,
James Rielly, . . . . .	30, .	1300 Parish street, Philadelphia, .	Burnham, Parry, Williams & Co.
John Kelley, . . . . .	30, .	1848 Hamilton street, Philadelphia, .	do. do.

WESLEY S. GODFREY, *Deputy Inspector.*

Date of injury.	Cause of accident.	Extent of injury.	Where sent.
Jan. 17, 1890,	Explosion of benzine. . . . .	Burned on neck and face, . .	German Hospital.
Jan. 20, 1890,	Falling of a wheel. . . . .	Foot crushed, . . . . .	German Hospital.
Jan. 24, 1890;	Falling from a tank. . . . .	Scalp wound, . . . . .	German Hospital.
Jan. 25, 1890,	Falling from a frame. . . . .	Foot bruised, . . . . .	Home.
Jan. 30, 1890.	Connecting rod fell on his hand.	Hand bruised, . . . . .	Hahnemann Hospital.
Jan. 31, 1890,	Slipped on circular saw, . . .	Thumb cut off, . . . . .	German Hospital.
Feb. 1, 1890,	Arm injured while boxing a tank.	Arm cut. . . . .	German Hospital.
Feb. 4, 1890.	Falling of smoke box ring. .	Ribs broken. . . . .	Home.
Feb. 5, 1890,	Belt striking him in face. . .	Contusion of face, . . . . .	Home.
Feb. 7, 1890.	Pulling waste from foot of gill-box.	Finger crushed. . . . .	Episcopal Hospital.
Feb. 12, 1890,	Slipped and fell on card roller.	Hand crushed. . . . .	Episcopal Hospital.
Feb. 14, 1890.	Pulling waste from under gill-box.	Thumb cut off, . . . . .	Germantown Hospital.
Feb. 15, 1880,	Caught between shifting engine and rack.	Severe bodily bruises, . . . .	Jefferson Medical College
Feb. 21, 1890,	Fell into coal hole. . . . .	Cut on head and shoulders.	
Feb. 21, 1890,	Caught between pilot and tender truck.	Leg broken, . . . . .	German Hospital.
Feb. 25, 1890.	Finger crushed by frame. . .	Finger crushed. . . . .	Hahnemann Hospital.
Feb. 28, 1890,	Burned by hot iron, . . . . .	Feet burned, . . . . .	Presbyterian Hospital.
Mar. 3, 1890.	Spinning roller. . . . .	End of finger cut off, . . . .	Episcopal Hospital.
Mar. 5, 1890.	Finger caught in machinery,	Finger off at first joint. . . .	Hahnemann Hospital.
Mar. 5, 1890,	Fell from elevator, . . . . .	Leg broken and head cut, . .	Episcopal Hospital.
Mar. 10, 1890,	Thumb crushed under a beam,	Thumb taken off at first joint,	Hahnemann Hospital
Mar. 11, 1890.	Caught between cylinder hlocks.	Thumb crushed, . . . . .	Hahnemann Hospital.
Mar. 12, 1890,	Caught between wheels. . . .	Leg injured, . . . . .	Home.
Mar. 12, 1890.	Caught between wheels and fire.	Knee crushed. . . . .	Home.
Mar. 19, 1890.	Fell while carrying iron. . . .	Arm slightly burned, . . . .	Hahnemann Hospital.
Mar. 25, 1890,	Carelessness. . . . .	Contusion of a finger.	
Mar. 26, 1890,	Quarrelling, . . . . .	Stahhed through hand. . . .	German Hospital.
Apr. 1, 1890.	Finger crushed by wheel. . . .	Finger cut off at first joint. .	Hahnemann Hospital.
Apr. 8, 1890.	Taking hold of belt, . . . . .	Hip dislocated and otherwise bruised.	Home.
Apr. 19, 1890,	Cutting scrap iron. . . . .	Finger crushed.	
May 6, 1890,	Fell from a tank. . . . .	Muscles of abdomen injured,	German Hospital.
May 6, 1890,	Fell down hatchway, . . . . .	Contusion of body, . . . . .	German Hospital.
May 7, 1890,	Fell from second floor, . . . .	Nose broken and otherwise injured.	German Hospital.
Apr. 23, 1890.	Carelessness. . . . .	Flesh wound of two fingers, .	Episcopal Hospital.
Apr. 1, 1890,	Carelessness, . . . . .	Back of hand injured, . . . .	Dr W. W. Johnson.
May 2, 1890.	Cut by piece of steel. . . . .	Lacerated face. . . . .	German Hospital.
May 14, 1890.	Falling of frame. . . . .	Crushed heel, . . . . .	German Hospital.

## ACCIDENTS—FIRST

NAME.	Age—Years.	Residence.	Name of employer.
Frank Fehn. . . . .	18.	1817 Germantown avenue, Phila., .	Henry H Sheip & Co. . . . .
John W. MacGregor. . . . .	. . .	2034 Cemetery avenue, Phila. . .	H. Whitakers Sons. . . . .
Patrick Dewan. . . . .	24.	1431 Spring Garden street, Phila.,	Burnham, Parry, Williams & Co.
Frank Mangelstoff. . . . .	55.	Fourth and Berks streets, Phila.,	Robert J. & R. Ritchie Co., . .
Harrison Boone. . . . .	16.	Norristown, Montgomery county.,	I. W. Smith. . . . .
Edward Gosline. . . . .	14.	2726 Anthracite street, Phila., . .	Hero Fruit Jar Company. . . .
Harry McMullin. . . . .	14.	1917 Pierce street, Philadelphia,	Geo. Campbell & Co., . . . . .
Charles Ransom. . . . .	16.	1162 Dorrence street, Philadelphia,	Burnham, Parry, Williams & Co.
George Wood. . . . .	40.	Ninth and Jefferson streets, Phila.,	McCallum & Sloan. . . . .
Dennis Coffey. . . . .	23.	1914 Earp street, Philadelphia. . .	Burnham, Parry, Williams & Co
Mrs. Elizabeth Bankhead, . . . .	. . .	2553 Hope street, Philadelphia, . .	John Bromley & Sons. . . . .
Kate Nathans. . . . .	17.	2523 East Cumberland st., Phila., .	Hero Fruit Jar Company. . . .
Alexander Anderson. . . .	14.	James street, Philadelphia. . . . .	do. do. . . . .
Scott Carter. . . . .	30.	1725 Olive street, Philadelphia. . .	Burnham, Parry, Williams & Co.
Bridget Brown. . . . .	12.	Bridgeport, Montgomery county, .	James Lees & Sons, . . . . .
Walter Boeringer. . . . .	16.	1431 Fawn street, Philadelphia, . .	Laird, Schober & Mitchell, . .
Nellie McGrath. . . . .	14.	1637 American street, Philadelphia,	Thomas A Pierce, . . . . .
Mary Cannon. . . . .	19.	Mercer street, Philadelphia. . . .	Hero Fruit Jar Company. . . .
James Burke. . . . .	45.	2426 Perot steet, Philadelphia. . .	Burnham, Parry, Williams & Co.
Daniel Yackley. . . . .	38.	2029 Woodstock street, Phila., . .	do do . . . . .
John McDonough. . . . .	14.	2537 Gordon street, Philadelphia, .	Hero Fruit Jar Company. . . .
Charles Hurst. . . . .	18.	1736 Cadwallader street, Phila., . .	Burnham, Parry, Williams & Co.
Patrick Bradley. . . . .	26.	40 North Second street, Phila., . .	do. do. . . . .
A. Stokes. . . . .	21.	615 North Thirty-ninth st. Phila ,	do do. . . . .
Henry B. Brazier, . . . . .	19.	1803 Pine street, Philadelphia. . .	do. do. . . . .
Joseph Morrison, . . . . .	15.	Philadelphia, . . . . .	A. H Wirz, . . . . .
Alice Johnson. . . . .	15.	2302 Coral street, Philadelphia, . .	John Bromley & Sons. . . . .
Lena Miller. . . . .	15.	Otis and Memphis streets, Phila., .	do. do . . . . .
John McGregor. . . . .	21.	1300 Ellsworth street Phila. . . . .	Burnham, Parry, Williams & Co
Daniel O'Keefe. . . . .	21.	Manayunk, Philadelphia. . . . .	Joseph M Adams, . . . . .
John McCool. . . . .	29.	1523 Pearl street, Philadelphia. . .	Burnham, Parry, Williams & Co
Frank Donahue, . . . . .	39.	410 North street, Philadelphia. . .	do. do. . . . .
John Bergin. . . . .	34.	1611 Olive street, Philadelphia. . .	do. do. . . . .
Joseph Neyden. . . . .	23.	423 Marriott street, Philadelphia, .	Wolfender, Shore & Co . . . .
John Kemper, . . . . .	30.	Philadelphia. . . . .	Hoyle, Harrison & Kaye, . . .
Thomas Forney, . . . . .	58.	Seventh and Federal sts , Phila., .	Boiler and Iron Plate Works. .
Rose Small. . . . .	26.	Tullp street, Philadelphia. . . . .	Thomas Boggs. . . . .
Adam Neiper. . . . .	15.	North Tenth street, Reading, . . .	Pennsylvania Hardware Co., .
Emil Trout. . . . .	20.	Huntingdon and Tulip sts., Phila.,	Hero Fruit Jar Company. . . .



DISTRICT—*Continued.*

Date of injury.	Cause of accident.	Cause of injury.	Where sent.
May 20, 1890,	Carelessness. . . . .	Fingers cut off. . . . .	St. Mary's Hospital.
May 21, 1890,	Hand caught in carding machine.	Loss of three fingers.	
May 28, 1890,	Caught between flasks. . . .	Finger crushed. . . . .	Hahnemann Hospital.
May 31, 1890,	Suffocation with smoke. . . .	Fatal. . . . .	Morgue.
May 18, 1890,	Caught in picker. . . . .	Loss of left arm. . . . .	Pennsylvania Hospital.
June 5, 1890,	Carelessness. . . . .	Finger cut. . . . .	Home.
June 6, 1890,	Picking wool from gear while in motion.	Laceration of hand. . . . .	Children's Hospital.
June 10, 1890,	Caught in grindstone. . . . .	Loss of finger. . . . .	German Hospital.
June 13, 1890,	Fell from elevator. . . . .	Bruised. . . . .	Germantown Hospital.
June 16, 1890,	Falling with molten iron. . .	Foot burned. . . . .	Presbyterian Hospital.
June 20, 1890,	Caught in winding-frame. . .	Loss of finger. . . . .	Episcopal Hospital.
June 20, 1890,	Carelessness. . . . .	Finger cut. . . . .	Dr. O'Callahan.
June 21, 1890,	Cleaning machine while in motion.	Finger cut. . . . .	Dr. O'Callahan.
June 30, 1890,	Falling of frame brace. . . .	Bone of foot broken. . . . .	German Hospital.
June 9, 1890,	Hand caught in cog wheel. .	Finger slightly injured. . . .	Dr. Mann.
June 23, 1890,	Caught in elevator. . . . .	Leg broken. . . . .	Pennsylvania Hospital.
July 1, 1890,	Putting hand on shaft. . . .	Finger taken off. . . . .	St. Mary's Hospital.
July 1, 1890,	Carelessness. . . . .	Finger cut. . . . .	Dr. O'Callahan.
July 2, 1890,	Foot run over by truck. . . .	Bruised foot. . . . .	Home.
July 2, 1890,	Leg caught by shafting. . . .	Bruised leg. . . . .	Home.
July 3, 1890,	Foot slipped. . . . .	End of finger cut off. . . . .	Dr. O'Callahan.
July 7, 1890,	Driving box fell on foot. . . .	Two toes mashed. . . . .	German Hospital.
July 15, 1890,	Iron falling on foot. . . . .	Laceration of foot. . . . .	German Hospital.
July 15, 1890,	Iron falling on foot. . . . .	Two toes slightly mashed. . .	Hahnemann Hospital.
July 18, 1890,	Caught in machine. . . . .	Laceration of thumb. . . . .	Dr. Thomas.
July 24, 1890,	Fell in potash kettle. . . . .	Hand and arm scalded. . . .	Hahnemann Hospital.
July 28, 1890,	Fell down elevator shaft. . .	Fracture of jaw and thigh, etc.	Episcopal Hospital.
July 28, 1890,	Fell down elevator shaft. . .	Burned hand, sprained ankle, etc.	Episcopal Hospital.
July 30, 1890,	Fell with molten iron. . . . .	Ankle burned. . . . .	Presbyterian Hospital.
Aug. 1, 1890,	Caught in picker. . . . .	Fatal. . . . .	Hospital.
Aug. 2, 1890,	Boiler fell against him. . . .	Internal. . . . .	Presbyterian Hospital.
Aug. 5, 1890,	Fell down elevator. . . . .	Head and hip bruised. . . . .	German Hospital.
Aug. 26, 1890,	Fell and struck knee. . . . .	Knee cap dislocated. . . . .	Home.
Aug. 27, 1890,	Caught by machine. . . . .	Arm torn off above elbow. . .	Presbyterian Hospital.
Aug. 29, 1890,	Piece of flying steel. . . . .	Loss of an eye. . . . .	Pennsylvania Hospital.
Sept. 3, 1890,	Cut by chinille cutter through carelessness.	Died same night. . . . .	Episcopal Hospital.
Sept. 6, 1890,	Cleaning loom while in motion.	Fingers crushed. . . . .	Episcopal Hospital.
Sept. 8, 1890,	Injured by elevator. . . . .	Abrasion of toe. . . . .	Home.
Sept. 12, 1890,	Carelessness. . . . .	Two fingers injured. . . . .	Dr. O'Callahan.

## ACCIDENTS—FIRST

NAME.	Age—Years.	Residence.	Name of employer
Maggie Ritterson, . . . . .	16, .	3055 Janney street, Philadelphia, .	Wolstenholme, Harrigan & Clarke.
William Patton, . . . . .	32, .	Bridesburg, Philadelphia, . . . . .	R. O. Moorehouse, . . . . .
John T. Leonard, . . . . .	15, .	2803 Reese street, Philadelphia, . .	Craven & Dearnly, . . . . .
John Norrett, . . . . .	18, .	1331 Melon street, Philadelphia, .	Burnham, Parry, Williams & Co.
Frank Mifflin, . . . . .	18, .	326 Belgrade street, Philadelphia, .	Hero Fruit Jar Company, . . .
Annie Hatzel, . . . . .	16, .	Cumberland street, Philadelphia, .	do. do. . . . .
John Shivers, . . . . .	17, .	Fifty-sixth and Chelsea sts., Phila.,	do. do. . . . .
John Shore, . . . . .	15, .	929 Point street, Philadelphia, . .	do. do. . . . .
J. Reilly, . . . . .	28, .	1632 South Eighth street, Phila., .	Burnham, Parry, Williams & Co.
Fred. Knight, . . . . .	29, .	3043 Lawrence street, Philadelphia, .	Moore Alpaca Company, . . . .
George M. McGittigar, . . . .	21, .	933 Warnock street, Philadelphia, .	Burnham, Parry, Williams & Co.
Amanda Rometch, . . . . .	13, .	Memphis and Venango sts., Phila.,	Schlichter Jute Cordage Co, . .
J. Dougherty, . . . . .	48, .	2111 Winter street, Philadelphia, .	Burnham, Parry, Williams & Co.
Thomas Martin, . . . . .	28, .	5 Clyde street, Philadelphia, . . .	do. do. . . . .
Thomas Quicksell, . . . . .	69, .	824 Lawrence street, Philadelphia, .	do. do. . . . .
George H. Foreman, . . . . .	17, .	1732 Tasker street, Philadelphia, .	do. do. . . . .
William Downey, . . . . .	22, .	1521 Pearl street, Philadelphia, . .	do. do. . . . .
William Kellett, . . . . .	33, .	2220 Cumberland street, Phila., . .	do. do. . . . .
William Davis, . . . . .	19, .	Eighteenth and Hamilton streets. Philadelphia.	do. do. . . . .
William Barger, . . . . .	45, .	877 Taylor street, Philadelphia, . .	do do. . . . .
James F. Johns, . . . . .	14, .	1408 Chadwick street, Philadelphia, .	John Mundell & Co., . . . . .
* William Adams, . . . . .	16, .	1829 Hazzard street, Philadelphia, .	Thomas Devlin, . . . . .
M. Hines, . . . . .	40, .	3 Barlow Place, Philadelphia, . . .	Burnham, Parry, Williams & Co.
A. D. Clark, . . . . .	21, .	2034 West Norris street, Phila., . .	do. do. . . . .
M. Freichell, . . . . .	19, .	1132 Callowhill street, Phila., . . .	do. do. . . . .
Julia Smith, . . . . .	40, .	2510 Helen street, Philadelphia, .	Robert Beatty, . . . . .
Veto Euzzolini, . . . . .	13, .	Bridgeport, Montgomery county, .	James Lees & Sons, . . . . .
Arnold Myers, . . . . .	48, .	1212 Haines street, Philadelphia, .	Burnham, Parry, Williams & Co.
Kate Clymer, . . . . .	20, .	806 Somerset street, Philadelphia, .	Craven and Dearnly, . . . . .
Morris McIlroy, . . . . .	25, .	1914 Rockland st., Philadelphia, .	Burnham, Parry, Williams & Co.
Peter Elmer, . . . . .	24, .	726 N. Thirty-sixth street, Phila.,	do. do. . . . .
Harry H. Langenstein, . . . .	13, .	Reese st. and Indian ave., Phila.,	John Blood & Co., . . . . .
Clemmens Fisher, . . . . .	30, .	2222 Coral street, Philadelphia, . .	P M. Walton, . . . . .

DISTRICT—*Continued.*

Date of injury.	Cause of accident.	Cause of injury.	Where sent.
Sept. 12, 1890.	Carelessness. . . . .	Bruised finger. . . . .	Dr. Ziegler.
Sept. 13, 1890.	Caught in belt. . . . .	Fatal.	
Sept. 18, 1890.	Taking lap off apron roll. . .	Part of finger cut off. . . . .	Episcopal Hospital.
Sept. 19, 1890.	Caught in planing machine. . .	Flesh wounds of leg. . . . .	German Hospital.
Sept. 20, 1890.	Carelessness. . . . .	Finger slightly cut. . . . .	Dr. O'Callahan.
Sept. 20, 1890.	Carelessness. . . . .	Nail cut on thumb of left hand.	Dr. O'Callahan.
Sept. 22, 1890.	Caught in belt. . . . .	Arm broken and scalp wound.	Presbyterian Hospital.
Sept. 23, 1890.	Carelessness. . . . .	End of finger slightly cut. . .	Dr. O'Callahan.
Sept. 25, 1890.	Caught by hoisting machine. . .	Broken leg. . . . .	German Hospital.
Sept. 25, 1890.	Caught by elevator. . . . .	Foot crushed. . . . .	Pennsylvania Hospital.
Sept. 30, 1890.	Bar of steel fell on foot. . . .	Foot injured. . . . .	German Hospital.
Oct. 9, 1890.	Caught in spinning frame. . . .	Finger taken off. . . . .	Episcopal Hospital.
Oct. 9, 1890.	Iron frame fell on leg. . . . .	Broken leg.	
Oct. 10, 1890.	Fell into coal pit. . . . .	Dislocation of shoulder.	
Oct. 12, 1890.	Piece of flying wood from lathe.	Bruised about head and arms.	
Oct. 24, 1890.	Caught in punching machine. . .	Part of finger taken off.	
Oct. 25, 1890.	Burned with molten iron. . . .	Burned about the feet.	
Oct. 29, 1890.	Piece of flying wood from lathe.	Head cut. . . . .	Home.
Oct. 30, 1890.	Slipped from a trestle. . . . .	Arteries of arm cut. . . . .	German Hospital.
Oct. 31, 1890.	Fell while oiling shaft. . . . .	Slight.	
Oct. 31, 1890.	Carelessness in feeding machine.	Part of finger taken off.	
June 12, 1890.	Injured by elevator. . . . .	Foot slightly lacerated. . . .	Episcopal Hospital.
Nov. 1, 1890.	Caught between flasks. . . . .	Hand slightly lacerated. . . .	Hahnemann Hospital.
Nov. 1, 1890.	Falling wheel. . . . .	Slight. . . . .	Home.
Nov. 1, 1890.	Dropped bar of iron on foot.	Foot cut. . . . .	Hospital.
Nov. 8, 1890.	Carelessness in cleaning machinery.	Amputation of finger. . . . .	Home.
Nov. 8, 1890.	Carelessness in cleaning machinery.	Amputation of thumb. . . . .	Pennsylvania Hospital.
Nov. 15, 1890.	Negligence. . . . .	Scalp wound. . . . .	German Hospital.
Nov. 15, 1890.	Carelessness in cleaning machinery.	Two fingers taken off.	
Nov. 18, 1890.	Caught in pulley. . . . .	Bone of forearm broken. . . .	German Hospital.
Nov. 21, 1890.	Falling of a beam. . . . .	Foot badly lacerated. . . . .	Presbyterian Hospital.
Nov. 26, 1890.	Caught between elevator and wall.	Amputation of two toes. . . .	Home.
Nov. 20, 1890.	Breaking of elevator. . . . .	Broken and lacerated arm. . .	St. Mary's Hospital.

## ACCIDENTS—FIRST DISTRICT—MRS. BELLE

NAME.	Age—Years.	Residence.	Name of employer.
John Welsh, . . . . .	16, .	Camden, N. J., . . . . .	Wilson Biscuit Company, . . .
John Murphy, . . . . .	. . .	143 John street, Philadelphia. . .	E. H. Morris, . . . . .
Thomas Howard, . . . . .	33, .	914 N. Front street, Philadelphia.	Knickerbocker Ice Company, . .
Paul Kelley, . . . . .	47, .	949 N. Front street, Philadelphia.	Marshall Brothers & Co., . . .
Patrick Quinn, . . . . .	45, .	Ninth st. and Montgomery ave., Philadelphia.	Royer Brothers, . . . . .
William Patton, . . . . .	32, .	2728 Irving street, Philadelphia, .	Robert O. Moorehouse, . . . .
G. A. Ambler, . . . . .	14, .	177 Levering street, Philadelphia.	George L. James, . . . . .
John Shivers, . . . . .	17, .	56th and Chelsea streets, Phila., .	Wolfenden, Shore & Co., . . .
C. McCool, . . . . .	14, .	1912 Carlton street, Philadelphia. .	Hoopes & Townsend, . . . . .
Geo. Masterson, . . . . .	26, .	Tacony, Philadelphia, . . . . .	Henry Disston & Sons, . . . .
G. Hoffman, . . . . .	26, .	808 North street, Philadelphia, . .	John Graff, . . . . .
May Armstrong, . . . . .	17, .	1150 Aman street, Philadelphia. . .	Wm. H. Hoskins, . . . . .
James J. Leonard, . . . . .	24, .	Holmesburg, Philadelphia, . . . .	Henry Disston & Sons, . . . .
Jacob Katz, . . . . .	18, .	1108 Passyunk avenue, Phila. . . .	Whitman & Sons, . . . . .
R. Millington, . . . . .	45, .	Hicks street, Philadelphia, . . . .	Robt. H. Foederer, . . . . .
Harold D. Owens, . . . . .	24, .	39 N. Twelfth street, Philadelphia,	H. K. Mulford & Co., . . . . .
Ernest Schmidt, . . . . .	14, .	23 N. Ninth street, Philadelphia, .	Blasius & Sons., . . . . .
James Reed, . . . . .	28, .	Frankford, Philadelphia, . . . . .	Robert O. Moorehouse, . . . .
James Campbell, . . . . .	51, .	Edgemont and Huntingdon Sts., Philadelphia.	Wm. Cramp & Sons Company.
John Foster, . . . . .	54, .	Alemendo street, Philadelphia, . .	do. do.
Samuel Evans, . . . . .	35, .	Shawmont street, Philadelphia, . .	Martin Nixon Paper Company.
Ida Dusenbury, . . . . .	19, .	1549 N. Eleventh street, Phila., . .	Thackara Manufacturing Co., .
John Hodgkiss, . . . . .	13, .	Tacony, Philadelphia, . . . . .	Henry Disston & Sons, . . . .
Joseph Miller, . . . . .	12, .	Philadelphia, . . . . .	Wm. Holt & Son, . . . . .
Thomas Reed, . . . . .	42, .	Dauphin street, Philadelphia, . .	Joseph Culbert, . . . . .
Alfred Stockinger, . . . . .	14, .	2344 Aramingo street, Philadelphia,	Central News Union, . . . . .
Edward Vanzant, . . . . .	35, .	Tacony, Philadelphia, . . . . .	Henry Disston & Sons, . . . .
William Pearsol, . . . . .	28, .	Tacony, Philadelphia, . . . . .	do. do. . . . .
Harry Welsh, . . . . .	20, .	831 Suffolk street, Philadelphia, . .	McLaughlin Brothers Company,
William Pratt, . . . . .	28, .	179 Ashmead street, Philadelphia,	McCullum & Sloan, . . . . .

## ACCIDENTS—SECOND DISTRICT—

Katie Dagler, . . . . .	17, .	Manheim, Lancaster county, . . .	Lauterbacher & Co., . . . . .
Caroline Browngart, . . . . .	13, .	Lancaster, . . . . .	F. Schroeder & Co., . . . . .
Harry Wells, . . . . .	19, .	Lancaster, . . . . .	Lancaster Caramel Company, .
John Adams, . . . . .	22, .	Lancaster, . . . . .	do. do. . . . .
Harry Koller, . . . . .	13, .	Reading, . . . . .	Reading Cotton Mill, . . . . .



McENERY, *Deputy Inspector—Continued.*

Date of injury.	Cause of accident.	Extent of injury.	Where sent.
Apr. 11, 1890.	Violation of orders, . . . . .	Hand mashed, . . . . .	Pennsylvania Hospital.
July 11, 1890.	Caught in card feeder, . . . . .	Hand crushed, . . . . .	St. Timothy Hospital.
Aug. 5, 1890.	Carelessness, . . . . .	Hand crushed, . . . . .	Pennsylvania Hospital.
Aug. 8, 1890.	Injured by crane, . . . . .	Part of thumb cut off, . . . . .	Pennsylvania Hospital.
Aug. 9, 1890.	Pulley fell on him, . . . . .	Contusion of body, . . . . .	German Hospital.
Sept. 13, 1890.	Caught in shafting, . . . . .	Fatal, . . . . .	Coroner.
Sept. 17, 1890.	Carelessness in cleaning machinery, . . . . .	Leg broken, . . . . .	St. Timothy Hospital.
Sept. 22, 1890.	Caught in belting, . . . . .	Severe scalp wound, . . . . .	Presbyterian Hospital.
Sept. 26, 1890.	Burned with hot iron, . . . . .	Artery of leg severed, . . . . .	Presbyterian Hospital.
Sept. 26, 1890.	Struck by sledge hammer, . . . . .	Finger crushed, . . . . .	Home.
Oct. 2, 1890.	Struck with a hammer, . . . . .	Thumb injured, . . . . .	Home
Oct. 3, 1890.	Hair caught in shaft, . . . . .	Lacerated scalp, . . . . .	Presbyterian Hospital.
Oct. 6, 1890.	Cut with steel, . . . . .	Arteries of arm severed, . . . . .	Home.
Oct. 9, 1890.	Caught in elevator, . . . . .	Injured about body, . . . . .	Pennsylvania Hospital.
Oct. 13, 1890.	Caught in shafting, . . . . .	Arm broken, . . . . .	Episcopal Hospital.
Oct. 15, 1890.	Struck by falling wall, . . . . .	. . . . .	Home.
Oct. 15, 1890.	Caught in elevator, . . . . .	Foot slightly bruised, . . . . .	Episcopal Hospital
Oct. 16, 1890.	Caught in machinery, . . . . .	Three fingers badly cut, . . . . .	Episcopal Hospital.
Oct. 17, 1890.	Falling brace, . . . . .	Scalp wound, . . . . .	Episcopal Hospital.
Oct. 17, 1890.	Falling from lumber pile, . . . . .	Spine fractured, . . . . .	Episcopal Hospital.
Oct. 17, 1890.	Falling of paper, . . . . .	Back and foot sprained, . . . . .	Dr. Custer.
Oct. 18, 1890.	Caught by elevator, . . . . .	Fatal, . . . . .	Home.
Oct. 21, 1890.	Broken belt, . . . . .	Injured on stomach, . . . . .	Home.
Oct. 29, 1890.	Pushed out of door by a boy, . . . . .	Bruised hip, . . . . .	Home.
Oct. 30, 1890.	Fell while putting on belt, . . . . .	Two ribs broken, . . . . .	St. Mary's Hospital.
Nov. 5, 1890.	Fell from balustrade, . . . . .	Jaw and arm broken, . . . . .	Jefferson Hospital.
Nov. 5, 1890.	Accidental, . . . . .	Top of thumb cut off, . . . . .	Home.
Nov. 12, 1890.	Burned with molten steel, . . . . .	Burned on foot, . . . . .	Home.
Nov. 18, 1890.	Falling from printing press, . . . . .	Foot crushed, . . . . .	Pennsylvania Hospital.
Nov. 20, 1890.	Punctured by steel wire, . . . . .	Not serious, . . . . .	Germanantown Hospital.

WM. H. LEWIS, *Deputy Factory Inspector.*

Feb. 17, 1890.	Putting on belt, . . . . .	Scalp torn off and arm broken, . . . . .	Home.
Feb. 22, 1890.	Cleaning frame while in motion, . . . . .	Finger torn off, . . . . .	Home.
Apr. 9, 1890.	Hand caught in rollers, . . . . .	Two fingers crushed, . . . . .	Campbell's drug store
July 9, 1890.	Carelessness, . . . . .	Two fingers crushed, . . . . .	Home.
July 14, 1890.	Breaking of a shaft, . . . . .	Scalp wound and bruises, . . . . .	Home.

## ACCIDENTS—SECOND

NAME.	Age—Years.	Residence.	Name of employer.
Lewis Kaufhold. . . . .	14. .	Orange street, Lancaster. . . . .	Arnold & Co.. . . . .
Daniel Finnen. . . . .	17. .	Harrisburg. . . . .	Harrisburg Handle Factory. . . . .
Joseph Smallback. . . . .	13. .	Lancaster. . . . .	Rose Brothers and Hartman. . . . .

JOHN F. LITTLE,

George Reisinger. . . . .	39. .	457 N. Eleventh street, Reading. . . . .	Grimshaw Brothers. . . . .
Howard Kinsey. . . . .	14. .	709 N. Ninth street, Reading. . . . .	F. S. Wertz & Co.. . . . .
William Parker. . . . .	21. .	Tyrone, Blair county, . . . . .	Morrison & Cass. . . . .
Alexander B. Ewing. . . . .		Main street, Tyrone, Blair county, . . . . .	do. do. . . . .

## ACCIDENTS—THIRD DISTRICT—

Alice McCaffrey. . . . .	14. .	104 Sandusky street Allegheny. . . . .	W. C. Pressing & Co.. . . . .
William Reed. . . . .	55. .	11 First street, Allegheny. . . . .	Pennsylvania Cotton Mill. . . . .
Harry Graybiegel. . . . .	23. .	Tarentum, Allegheny county, . . . . .	C. L. Flaccus. . . . .
John Huhe. . . . .		Allegheny. . . . .	Baker Chain and Wagon Iron Manufacturing Company.
Chas. Weiser. . . . .	19. .	Shady avenue, Allegheny. . . . .	Baker Chain and Wagon Iron Manufacturing Company.
Annie Eidmiller. . . . .	19. .	331 Beaver avenue, Allegheny. . . . .	Home Steam Laundry. . . . .
John Weber. . . . .	30. .	Franklin street, Allegheny. . . . .	Pittsburgh Pretzel Company. . . . .

M. N. BAKER,

Frank Steckman. . . . .	15. .	Pittsburgh. . . . .	Fleming & Hamilton. . . . .
John Curren. . . . .	16. .	Pittsburgh. . . . .	Taylor & Dean. . . . .
David Welsh. . . . .	35. .	Carson street, Pittsburgh. . . . .	Philips & Nimick. . . . .
John Bower. . . . .	43. .	Eleventh street, Erie. . . . .	H. F. Watson. . . . .
John Leskousky. . . . .	25. .	Smallman street, Pittsburgh. . . . .	Park Brothers & Co.. . . . .
Fred. Hammersley. . . . .	14. .	Eleventh ward, Allegheny. . . . .	McKinney Manufacturing Co.. . . . .
James McMullin. . . . .	35. .	Penn avenue, Pittsburgh. . . . .	Park Brothers & Co.. . . . .
Joseph Muck. . . . .	44. .	Hillside, Pittsburgh. . . . .	do. do. . . . .
Antonia Kreshitsky. . . . .	25. .	Twenty-sixth street, Pittsburgh. . . . .	do. do. . . . .
James B. Smallwood. . . . .	30. .	186 Fremont street, Allegheny. . . . .	A. French & Co. , . . . .
Mike Barcisto. . . . .			Carnegie. Phipps & Co. . . . .
Maud Mullen. . . . .	13. .	166 Stewart street, Allegheny. . . . .	J. O. Schimmel Pres. Co. . . . .
B. Gray. . . . .	28. .	Pittsburgh. . . . .	Howe, Brown & Co. . . . .
D. Hoffman. . . . .		Allegheny. . . . .	Pittsburgh Locomotive Works. . . . .
Geo. Rauock. . . . .	33. .	Pittsburgh. . . . .	Pittsburgh Tube Company. . . . .

DISTRICT—*Continued.*

Date of injury.	Cause of accident.	Extent of injury	Where sent.
Aug. 29, 1890.	Carelessness . . . . .	Loss of three fingers. . . . .	Home.
Aug. 23, 1890.	Circular saw . . . . .	Finger cut. . . . .	Hospital.
Nov. 9, 1890.	Ran nail into foot . . . . .	Lockjaw resulting fatally. . . . .	Home.

*Deputy Inspector.*

Oct. 22, 1890.	Arm caught by crank pin. . . . .	Arm broken. . . . .	Home.
Oct. 22, 1890.	Caught between rollers. . . . .	Skin entirely torn off hand. . . . .	Home.
Oct. 25, 1890.	Caught by shaft. . . . .	Arm broken and thumb torn off. . . . .	Home.
Nov. 10, 1890.	Struck his head and knocked into hot liquor. . . . .	Fatal. . . . .	Home.

MRS. NAN. Y. LESLIE, *Deputy Inspector.*

July 31, 1890.	Curiosity. . . . .	Loss of four fingers. . . . .	Home.
Sept. 2, 1890.	Caught finger in engine. . . . .	Finger amputated. . . . .	Home.
Sept. 26, 1890.	Neglect in turning gas off. . . . .	Hand and face burned in explosion. . . . .	Home.
Sept. 27, 1890.	Carelessness. . . . .	Hand bruised. . . . .	Home.
Oct. 13, 1890.	Knocking over a torch. . . . .	Severe burn. . . . .	Home.
Oct. 30, 1890.	Carelessness. . . . .	Hand crushed. . . . .	Allegheny Gen'l Hospital.
Nov. 18, 1890.	Caught in machinery. . . . .	Hand crushed. . . . .	Allegheny Gen'l Hospital.

*Deputy Inspector.*

Feb. 26, 1890.	Caught in elevator. . . . .	Fatal. . . . .	
May 21, 1890.	Caught in elevator. . . . .	Fatal. . . . .	
May 22, 1890.	Ran over by buggy. . . . .	Thumb crushed. . . . .	Home.
June 5, 1890.	Caught in belting. . . . .	Fatal. . . . .	Riblets.
June 16, 1890.	Fell while putting up gas pipe. . . . .	Contusion and fractured collar-bone. . . . .	Home.
June 24, 1890.	Caught in shafting. . . . .	Fatal. . . . .	Undertakers.
June 16, 1890.	Fell while putting up gas pipe. . . . .	Badly bruised. . . . .	Home.
July 21, 1890.	Fell into furnace pit. . . . .	Burned and scalp wound. . . . .	St Francis Hospital.
July 25, 1890.	Struck with crane handle. . . . .	Contusion of spine. . . . .	Forty-fourth St. Hosp.
Aug. 11, 1890.	Falling of hot rolls. . . . .	Cut on leg. . . . .	Home.
Aug. 21, 1890.	Falling of a beam. . . . .	Finger cut off. . . . .	
Aug. 26, 1890.	Carelessness. . . . .	Finger cut off. . . . .	Home.
Sept. 1, 1890.	Struck by a piece of steel. . . . .	Fatal. . . . .	West Pennsylvania Hosp.
Sept. 22, 1890.	Caught in belting. . . . .	Arm injured. . . . .	Allegheny Gen'l Hospital.
Sept. 23, 1890.	Falling of a casting. . . . .	Foot crushed. . . . .	Mercy Hospital.

## ACCIDENTS—THIRD

NAME.	Age—Years.	Residence.	Name of employer.
Steve Lightner, . . . . .		Braddock, Allegheny county, . . .	Carnegie, Phipps & Co. . . . .
Mike Martin, . . . . .	25.	Jones avenue, Pittsburgh. . . . .	Park Brothers & Co., . . . . .
Peter Leahney, . . . . .		Forbes street, Pittsburgh, . . . . .	Moorehead, McClean & Co., . . .
Fred. Becker, . . . . .		Pittsburgh, . . . . .	do. do. . . . .
Louis Yardon, . . . . .		do. . . . .	do. do. . . . .
Aug. Murh. . . . .		do. . . . .	do. do. . . . .
Andy Hydue, . . . . .		do. . . . .	do. do. . . . .
Mike Hoovart, . . . . .		do. . . . .	do. do. . . . .
Mike Benine, . . . . .		do. . . . .	do. do. . . . .
Losco Friedwood, . . . . .		do. . . . .	do. do. . . . .
Edward Hughes, . . . . .		do. . . . .	do. do. . . . .
Robert Gibbs, . . . . .		Homestead, Allegheny county, . .	Carnegie, Phipps & Co. . . . .
James McSloy, . . . . .		Erie, . . . . .	Jarecki Manufacturing Co., . . .
—— Bengston . . . . .		Erie, . . . . .	do. do. . . . .
Louis Wassmuth, . . . . .	37.	Twenty-fifth street, Erie, . . . .	H. F. Watson Paper Mfg. Co., .
Robert Genta, . . . . .	16.	Eighth street, Pittsburgh. . . . .	Oliver Iron and Steel Company,
Charles H. Kane, . . . . .	15.	McKeesport, Allegheny county, .	National Tube Company. . . . .
Julius Bentling, . . . . .	52.	Rochester, Beaver county, . . . .	Rochester Tumbler Company, .



DISTRICT—*Continued.*

Date of injury.	Cause of accident.	Extent of injury.	Where sent.
Sept. 23, 1890,	Blowing out of ingot. . . . .	Limbs severely burned, . . .	Home.
Sept. 24, 1890,	Falling of crane, . . . . .	Fatal. . . . .	St. Francis' Hospital
Oct. 16, 1890,	Slipping of coke, . . . . .	Burned, . . . . .	Home.
Oct. 16, 1890,	do. do. . . . .	Burned, . . . . .	Mercy Hospital.
Oct. 16, 1890,	do do . . . . .	Burned, . . . . .	Mercy Hospital.
Oct. 16, 1890,	do do. . . . .	Fatal, . . . . .	Mercy Hospital.
Oct. 16, 1890,	do do . . . . .	do. . . . .	Mercy Hospital.
Oct. 16, 1890,	do do . . . . .	do. . . . .	Mercy Hospital.
Oct. 16, 1890,	do. do. . . . .	do. . . . .	Homeopathic Hospital.
Oct. 16, 1890,	do do. . . . .	do. . . . .	Homeopathic Hospital.
Oct. 16, 1890,	do do. . . . .	do. . . . .	Homeopathic Hospital.
Oct. 14, 1890,	Shifting of ladle. . . . .	Finger taken off, . . . . .	Home.
Nov. 13, 1890,	Engine fell on him, . . . . .	Fatal, . . . . .	Home.
Nov. 13, 1890,	Engine fell on him, . . . . .	Bruised about loins, . . . . .	Hospital.
Nov. 19, 1890,	Caught in helting. . . . .	Fatally, . . . . .	Undertakers.
Nov. 26, 1890,	Carelessness, . . . . .	Fatally, . . . . .	Home.
Oct. 21, 1890,	Foot caught in gearing, . . .	Loss of foot, . . . . .	Home.
Nov. 19, 1890,	Foot run over, . . . . .	Two toes crushed, . . . . .	Home.

STATISTICS OF FACTORIES VISITED—DISTRICT No. 1—PHILADELPHIA. *WESLEY S. GODFREY, Deputy.*

NAME OF FACTORY OR WORKSHOP.	Goods manufactured.	NUMBER EMPLOYED.			Sanitary condition.	Date of inspection.	Orders given.	Compliance.
		Males.	Females.	Under 12. 12 to 16.				
Perseverance, . . . . .	Carpet yarns, . . . . .	27	7	..	Good,	Jan. 21.		
Sherman Carpet Mills, . . . . .	Carpets, . . . . .	58	65	1	..	21.		
Franklin Carpet Mills, . . . . .	Carpets, . . . . .	30	60	4	..	22.		
Getty & Spratt, . . . . .	Carpets, . . . . .	20	18	..	..	22.		
Burrs' Boiler Shop, . . . . .	Boiler and plate works, . . . .	10	..	..	..	24.		
Needham Hosiery Mill, . . . . .	Hosiery and underwear, . . . .	73	410	..	..	24.		
Pilling & Madeley, . . . . .	" " " " " " " " " " " "	125	600	200	..	22.		
Scott Manufacturing Company, . .	Underwear, . . . . .	11	89	10	..	27.	Fire escape ordered, . . . . .	Complied.
Puddington Hosiery Mill, . . . . .	Hosiery and jerseys, . . . . .	17	90	14	..	27.		
Washington Mills, . . . . .	Zephyr, wool and yarns, . . . .	50	10	10	..	27.		
James & George D. Bromley, . . .	Carpets, . . . . .	150	150	11	..	27.		
Live Oak, Cotton and Woollen Mill.	Cotton and woollen goods, . . .	8	14	..	..	28.		
Cumberland Mill, . . . . .	" " " " " " " " " " " "	5	40	..	..	28.		
Welcome Manufacturing Company,	Cotton goods, . . . . .	10	6	..	..	28.		
Schlichter, Jute Cordage Company, .	Jute rope, twine, . . . . .	190	160	140	..	28.		
Joseph Pollett, . . . . .	Hosiery, yarns, . . . . .	16	6	6	..	31.		
Cotton and Hosiery Yarns, . . . . .	" " " " " " " " " " " "	60	40	15	..	31.		
James Kitcheman, . . . . .	Carpets and carpet yarns, . . .	100	100	5	..	31.		
Kitcheman & Neals' Carpets, . . .	Brussels carpet, . . . . .	50	10	11	..	31.		
James Meadowcroft & Sons, . . . .	Carpet yarns, . . . . .	25	7	4	..	29.		

Woolen Machine Company, . . . .	30	..	..	..	..	29.
Erben Search & Co., . . . . .	24	250	..	56	..	29.
S. B. & B. W. Fleisher, . . . . .	100	200	..	115	..	29.
Lazarus, Schwarz & Lipper, . . . .	75	125	..	12	..	30.
Mount Vernon Mills, . . . . .	75	125	..	12	..	30.
T. J. Linderman & Co., . . . . .	27	73	..	15	..	30.
Job Beatty's Sons, . . . . .	33	12	..	4	Fair,	30.
Carey Bros., . . . . .	76	12	..	48	Good,	30.
Osprey Hosiery Company, . . . . .	12	8	..	..	..	30.
Barnes & Beyers, . . . . .	167	47	..	56	..	30.
L. C. Kresher, . . . . .	105	20	..	..	..	30.
Glenn Carpet Mill, . . . . .	45	45	..	..	..	30.
James H. Kerr, . . . . .	41	54	..	2	..	30.
Providence Dye Works, . . . . .	158	25	..	..	..	30.
Montgomery Carpet Mill, . . . . .	36	90	..	4	..	30.
Ricketts' & Prince, . . . . .	15	15	..	1	..	30.
Reading Screw Company, . . . . .	38	10	..	10	..	30.
Rock Carpet Mills, . . . . .	25	50	..	1	..	30.
Endurance Mill, . . . . .	100	250	..	14	..	30.
J. A. Klander & Co., . . . . .	22	210	..	..	..	30.
Boylston Mills, . . . . .	30	75	..	18	..	30.
Victoria Mills, . . . . .	17	50	..	..	..	30.
Dickey & McMaster, . . . . .	26	10	..	..	..	30.
William Allen & Son, . . . . .	41	7	..	..	..	30.
Standard Worsted Mills, . . . . .	50	75	..	4	..	30.
Rainbow Dye Works, . . . . .	30	..	..	1	..	30.
Brown Bros. & Aberle Company, . . . .	131	..	..	25	..	30.
York Carpet Mills, . . . . .	38	12	..	1	..	30.

## STATISTICS OF FACTORIES—PHILADELPHIA—Continued.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured.	NUMBER EMPLOYED.			Sanitary condition.	Date of inspection.	Orders given.	Compliance.
		Males.	Females.	Under 12. 12 to 16.				
Fred. Rumpf & Bro., . . . . .	Damask and Turkey red cloth.	70	70	7	Good.	Feb. 7.		
Star and Crescent Mills Company, . . . . .	Turkish towels, etc., . . . . .	51	50	..	..	11.		
Greenhalgh & Wadsworth, . . . . .	Plushes, . . . . .	5	25	..	..	12.		
Robert Lewis, . . . . .	Upholstery goods, . . . . .	44	6	11	..	12.		
Riverview Knitting Mills, . . . . .	Jerseys and knit goods, . . . . .	5	17	..	..	12.		
Mineola Mills, . . . . .	Carpets and worsted yarns, . . . . .	60	40	24	..	12.		
Mariborough Mills, . . . . .	Fancy knit goods and hosiery,	75	75	9	..	10.		
Craven & Dearnly, . . . . .	Worsted and woolen yarns, . . . . .	70	190	53	..	14.	Comply with the law in full, . . . . .	Complied
R. & J. Stinson, . . . . .	Carpets, . . . . .	18	34	2	..	14.		
Orinoka Mill, . . . . .	Upholstery goods, . . . . .	150	50	14	..	13.		
Somerset Carpet Mills, . . . . .	Carpets, . . . . .	16	14	..	..	12.		
Atlas Knitting Mill, . . . . .	Hosiery, . . . . .	57	60	13	..	14.	Gate to elevator, . . . . .	Complied.
Kensington Knitting Mill, . . . . .	Cardigan jackets and hosiery.	40	110	32	..	10.	Gate to elevator ; put water closets for females, in good condition.	..
Louis Webers' Mills, . . . . .	Fancy hosiery, . . . . .	25	60	18	..	10.	Erect fire escape, . . . . .	..
James Hogg's Knitting Mill, . . . . .	Jerseys and knit goods, . . . . .	15	45	..	..	10.	..	..
Woodberry Hosiery Mill, . . . . .	Hosiery and knit goods, . . . . .	15	70	13	..	11.	..	..
Kensington Knitting Mill, . . . . .	Stockinet and astrakan cloth,	30	90	..	..	11.	..	..
Eureka Carpet Mills, . . . . .	Carpets, . . . . .	45	15	..	..	11.		
Blair & Beggs, . . . . .	Curtains, . . . . .	30	30	3	..	14.		



John Blood & Co., . . . . .	Hosiery and jerseys, . . . . .	74	300	..	61	..	14,	Gate to elevator, . . . . .	14,	Compld.
John Bromley & Sons, . . . . .	Carpets and rugs, . . . . .	600	500	..	72	..	13.			
Cresswell & Washburn, . . . . .	Paper hangings, . . . . .	75	..	..	15	..	17,	Gate to elevator, . . . . .	17,	Compld.
Howell & Brothers, . . . . .	..	175	..	..	56	..	17.			
Tioga Mills, . . . . .	Hosiery yarns, . . . . .	50	20	..	10	..	19.			
Joshua Madeley, . . . . .	..	14	5	..	4	..	19.			
Joseph Black, . . . . .	Hosiery, . . . . .	7	118	..	34	..	19.			
Robinson & Hall, . . . . .	Carpets, . . . . .	22	16	..	..	..	19.			
Diamond Carpet Mills, . . . . .	..	70	60	..	5	..	20,	Gate to elevator, . . . . .	20,	Compld.
Oak Mills Co., . . . . .	Hosiery and knlt goods, . . . . .	100	100	..	20	..	21.			
Oxford Knitting Mills, . . . . .	Cardigan jackets, . . . . .	75	125	..	..	..	21,	Gate to elevator, . . . . .	21,	Compld.
Simpson & McAllister, . . . . .	Brussels carpets, . . . . .	38	14	..	9	..	20,	..	20,	..
John Stewart & Sons, . . . . .	Rugs, . . . . .	75	11	..	3	..	20.			
J. A. Campbell & Bro., . . . . .	Plush goods, . . . . .	45	45	..	5	..	26.			
Stewart, Ralph & Co., . . . . .	Snuff, . . . . .	52	28	..	6	..	27,	Ventilate place, . . . . .	27,	Compld.
Ripka Mills, . . . . .	Cotton and woolen dress goods	32	58	..	15	..	26.			
Eagle Mills, . . . . .	Woolen goods, . . . . .	105	110	..	6	..	26,	Two main belts to box. . . . .	26,	Compld.
Model Mills, . . . . .	Ingrain carpets, . . . . .	31	31	..	..	..	25,	Gate to elevator, . . . . .	25,	..
Model Mills, . . . . .	Standard Ingrain carpets, . . . . .	71	50	..	..	..	25,	..	25,	..
Nepaul Mills, . . . . .	Upholstery goods, . . . . .	100	150	..	..	..	24.			
Orianna Mills, . . . . .	Smyrna rugs and mats, . . . . .	300	50	..	33	..	24.			
Folwell Bro. & Co., . . . . .	Dress goods and coatings, . . . . .	256	240	..	80	..	24,	One belt to box. . . . .	24,	Compld.
Hero Fruit Jar Company, . . . . .	Sheet and white metal goods, . . . . .	800	200	..	..	..	24,			
Model Mills, . . . . .	Cotton and woolen goods, . . . . .	5	45	..	..	..	25,	Gate to elevator, . . . . .	25,	Compld.
Porter & Dickey, . . . . .	..	14	86	..	9	..	Mar.			
Weber & Keneston, . . . . .	Hosiery, . . . . .	4	36	..	10	..	3.			
Berwink & Weed, . . . . .	Cloths, . . . . .	42	20	..	..	..	3.			
Bromley Bros., . . . . .	Carpets and rugs, . . . . .	250	250	..	13	..	7.	Gate to elevator, . . . . .	7.	Compld.
Putnam Carpet Mills, . . . . .	Brussels carpets, . . . . .	66	72	..	8	..	7.			

## STATISTICS OF FACTORIES—PHILADELPHIA—Continued.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured.	NUMBER EMPLOYED.				Sanitary condition.	Date of inspection.	Orders given.	Compliance.
		Males.	Females.	Under 12.	12 to 16.				
Keystone Carpet Mills, . . . . .	Ingrain carpets, . . . . .	70	60	1	1	Good,	Mar.		
Howard Mills, . . . . .	Cotton and woolen goods, . .	12	97	4	4	"	7.	Gate to elevator, . . . . .	Complied.
John Bromley & Sons, . . . . .	Rugs, . . . . .	550	200	60	60	"	7.	"	
Horne Bros., . . . . .	Carpets, . . . . .	350	150	45	45	"	4.		
American Machine Company, . . .	Hardware specialties, . . . .	90	...	5	5	"	4.		
National Hardware and Malleable Iron Works.	Malleable fittings for gas and steam.	300	...	15	15	"	4.		
J. B. Smith & Co., . . . . .	Files and saws, . . . . .	100	...	23	23	"	4.		
Excelsior Mills, . . . . .	Upholstery goods, . . . . .	53	32	11	11	"	3.	Gate to elevator, . . . . .	Complied.
Hampden Woolen Mills, . . . . .	Woolen goods, . . . . .	100	100	9	9	"	3.	"	
E. H. Stroud, . . . . .	Draperies, . . . . .	23	10	7	7	Poor,	6.	Water closet for females; fire escape, . . . . .	
Krout & Flte, . . . . .	Tapes and blindings, . . . . .	2	5	2	2	Good,	6.	Fire escape ordered, . . . . .	
Park Carpet Mills, . . . . .	Carpets, . . . . .	100	200	25	25	"	6.		
Stinson Bros. & Kurtbaum, . . . .	"	300	150	20	20	"	5.	Gate to elevator, . . . . .	Complied.
Hoyle, Harrison & Kaye, . . . . .	Upholstery goods, . . . . .	175	125	52	52	"	5.	Comply with the law in full, . . . . .	
Norris Carpet Mill, . . . . .	Ingrain carpets, . . . . .	30	30	...	...	"	5.		
A. Boyle & Bro., . . . . .	Hosiery, . . . . .	2	48	17	17	"	5.		
Victoria Mills, . . . . .	Jerseys and ribbed underwear	25	200	20	20	"	6.	Belts to be boxed, . . . . .	Complied.
Thomas Dolan & Co., . . . . .	Cloths and underwear, . . . .	450	300	27	27	"	14.	Gates to elevator, . . . . .	
Clermont Knitting Mills, . . . . .	Hosiery and knit goods, . . . .	25	75	...	...	"	13.		

Sanquott Silk Manufacturing Co.,	Silk and silk goods, . . . . .	25	200	..	21	..	10.		
Monhor Carpet Mills, . . . . .	Carpets, . . . . .	200	200	..	12	..	13.		
Thomas Dolan & Co., . . . . .	Woolen spinning, . . . . .	250	50	..	47	..	14.	Gate to elevator, . . . . .	Complied.
Ivins, Dietz & Magee, . . . . .	Carpets, . . . . .	200	200	..	23	..	13.		
David McDowell, . . . . .	" . . . . .	18	21	..	..	..	12.		
Star Carpet Mills, . . . . .	" . . . . .	100	100	..	13	..	13.	Belts to box; gate to elevator, . . . . .	Complied.
John Blood & Bro., . . . . .	Hosiery and underwear, . . . . .	50	125	..	19	..	11.		
Diamond Mills, . . . . .	Upholstery goods, . . . . .	35	35	..	17	..	11.		
Wm. Ayres & Son, . . . . .	Horse blankets, yarns, etc., . . . . .	200	200	..	23	..	10.		
Delaware Carpet Mills, . . . . .	Carpets, . . . . .	200	40	..	33	..	10.		
Philip Doer & Co., . . . . .	" . . . . .	30	100	..	9	..	11.		
Henry H. Shelp & Co., . . . . .	Cigar boxes, . . . . .	140	43	..	4	..	11.		
A. M. Collins & Co., . . . . .	Card board, etc., . . . . .	150	125	..	48	..	12.		
Pennsylvania Hosiery Mill, . . . . .	Hosiery and knit goods, . . . . .	100	300	..	36	..	12.		
Graham & Reid, . . . . .	Hosiery, . . . . .	10	40	..	4	..	17.		
Ontario Mill, . . . . .	Hosiery yarns, . . . . .	20	11	..	11	Poor.	17.	Insufficient number of water closets, . . . . .	Complied.
Pbladelphia Knitting Mill, . . . . .	Hosiery and knit goods, . . . . .	20	100	..	..	Good,	17.		
Bruning & Ludwig, . . . . .	Ingrain carpets, . . . . .	20	11	..	..	..	17.		
S. Vernon, . . . . .	Hosiery goods, . . . . .	7	38	..	3	Bad.	18.	Water closets in bad condition, . . . . .	Complied
Harrison Carpet Mill, . . . . .	Carpets, . . . . .	100	175	..	..	Good,	18.	Water closets in bad condition, . . . . .	Complied
Edward Weber, . . . . .	" . . . . .	9	11	..	..	Bad.	18.	Gate to elevator, and put closets in good condition	"
Robert Blood, . . . . .	Hosiery goods, . . . . .	10	45	..	11	..	18.		
Vaughn & Bower, . . . . .	" . . . . .	15	22	..	3	Good,	18.		
Westphalia Manufacturing Co., . . . . .	Curtains, . . . . .	24	16	..	..	Poor,	17.	Sanitary orders given, . . . . .	Complied.
Quaker City Dye Works, . . . . .	Dyeing, . . . . .	325	25	..	7	Good,	19.		
Felster Printing Company, . . . . .	Printing labels, . . . . .	67	118	..	54	"	19.		
Jonathan Ring & Son, . . . . .	Woolen yarns, . . . . .	100	20	..	..	..	19		
Wilson & Co., . . . . .	Hosiery, . . . . .	10	30	..	4	Poor.	19.	Water closets ordered, . . . . .	Complied.
Caterson, Brotz & Co., . . . . .	Card printing, . . . . .	6	16	..	..	Good.	20.	Gate to elevator, . . . . .	"

## STATISTICS OF FACTORIES—PHILADELPHIA—Continued.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured.	NUMBER EMPLOYED.			Sanitary condition.	Date of inspection.	Orders given.	Compliance.	
		Males.	Females.	Under 12.					12 to 16.
Brighton Manufacturing Company.	Cotton and woolen goods, . .	45	45	..	3	Poor.	Mar. 20.	Insufficient number of water closets. . . . .	Complied.
Geo. W. Brooke, . . . . .	Turkish towels and terrycloth,	20	25	..	1	..	20.	Gate to elevator; water closets ordered. . . . .	..
Raleigh Mills, . . . . .	Carpets, . . . . .	13	37	..	1	..	20.	..	..
Moore Alpaca Company, . . . . .	Cotton, woolen and silk goods,	46	60	..	3	Good.	20.	Gate to elevator, . . . . .	..
Raleigh Mills, . . . . .	Tapes and suspenders, . . . .	30	150	..	21	..	21.		
Gillender & Son, . . . . .	Flint glass, . . . . .	305	20	..	65	..	24.		
Clark & Keen, . . . . .	Woolen and worsted goods, . .	87	60	..	..	..	24.		
Eagle Hosiery Mill, . . . . .	Hosiery, . . . . .	15	20	..	4	..	24.		
Way Manufacturing Company, . .	Underwear, . . . . .	50	150	..	1	..	24.		
American Knitting Mill, . . . . .	Hosiery and yarns, . . . . .	50	450	..	69	..	25.		
W. F. Louden & Co., . . . . .	Dress and upholstery trim'gs,	9	15	..	11	..	25.		
Menge, Weiner & Co., . . . . .	Cigars, . . . . .	310	40	..	8	..	25.		
Montgomery Mills, . . . . .	Cotton and silk goods, . . . .	19	172	..	..	..	26.		
Enterprise Manufacturing Co., . .	Hardware, . . . . .	800	..	..	31	..	26.		
Hoefle & Wilson, . . . . .	Carpets, . . . . .	35	15	..	3	..	26.		
Crown Knitting Mills, . . . . .	Jerseys and knit goods, . . . .	10	115	..	3	..	27.		
Bach & Co., . . . . .	Cigars, . . . . .	6	36	..	7	..	27.		
A. J. Cameron & Co., . . . . .	Worsted and woolen yarns, . .	..	15	..	2	..	27.		
National Button Works, . . . . .	Buttons, . . . . .	20	46	..	..	Poor.	27.	Water closets ordered.	Complied.
Phillp Wunderle, . . . . .	Candles, . . . . .	85	65	..	22	Good.	28.		



	660	170	41	28		
John B. Stetson, . . . . .	Hats, . . . . .	170	..	41	..	28
Edward White, . . . . .	Shawls, . . . . .	16	..	..	..	31.
Thomas Jagers, . . . . .	Cotton and woolen yarns, . .	28	..	4	..	31.
Kueston & Foulk, . . . . .	Carpets, . . . . .	18	..	..	..	31.
John F. Lodge, . . . . .	Carpet yarns, . . . . .	42	..	..	..	31.
John Dallas' Sons, . . . . .	Cotton and woolen goods, . .	40	..	..	..	31.
E. Sutro, . . . . .	Hosiery, . . . . .	45	..	30	..	April 1.
Pennsylvania Woolen Company, . .	Woolen coatings and suitings, .	200	..	46	..	2.
Continental Worsted Company, . .	Worsted goods, . . . . .	200	..	165	..	2.
John Stewart, . . . . .	Cotton goods, . . . . .	38	..	..	..	2.
John W. Kershaw, . . . . .	Cotton and woolen goods, . .	4	..	..	..	3.
Pittfield Mill No. 1, . . . . .	.. ..	40	..	3	..	3.
Washington Flint Glass Works, . .	Glass, . . . . .	217	..	51	..	3.
Fairmount Spinning Mills, . . . .	Cotton spinning, . . . . .	69	..	14	..	3.
Caledonia Carpet Mills, . . . . .	Carpets, . . . . .	100	..	69	..	3.
E. H. Godshall & Co., . . . . .	Upholstery linings, . . . . .	150	..	1	..	3.
Columbia Mills, . . . . .	Cotton and woolen goods, . .	10	..	1	..	4
Midnight Yarn Company, . . . . .	Carpet yarns, . . . . .	29	..	10	Fair,	4.
Whittle & Leaves, . . . . .	Hosiery, . . . . .	25	..	5	..	4
Wamsutta Mills, . . . . .	Cotton and woolen goods, . .	10	..	..	..	4
Universal Hosiery Mill, . . . . .	Hosiery, . . . . .	25	..	6	..	4
Robert Mitcheson, . . . . .	Pipes, . . . . .	75	..	2	..	4.
Philip Houck, . . . . .	Paper boxes, . . . . .	25	..	42	..	4.
Creston Hosiery Mill, . . . . .	Hosiery, . . . . .	20	..	20	..	9.
Baeder, Adamson & Co., . . . . .	Glue, . . . . .	797	..	37	..	9.
Pequea Mills, . . . . .	Textile fabrics, . . . . .	500	..	26	..	10
Cambria Carpet Mill, . . . . .	Carpets, . . . . .	102	..	5	..	10.
James J. Muncey & Co., . . . . .	Glass, . . . . .	195	..	35	..	10.
Star Mills, . . . . .	Cotton and woolen goods, . .	45	..	6	..	10.

Comply with section 10. . . . .

Complied.

Door to elevator, . . . . .

Complied.

## STATISTICS OF FACTORIES—PHILADELPHIA—Continued.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured.	NUMBER EMPLOYED.				Sanitary condition.	Date of inspection.	Orders given	Compliance.
		Males.	Females.	Under 12.	12 to 16.				
Glenmore Worsted Yarn Company,	Worsted yarns, . . . . .	67	125	..	15	Good.	April 21,	Door to elevator, . . . . .	Complied.
Richmond Dyeing and Printing Works.	Dyeing and finishing works, .	161	14	..	3	"	21.		
Alexander Balfour, . . . . .	Paper, . . . . .	1	75	..	..	"	21.		
A. Schoenhut & Co., . . . . .	Toys and novelties, . . . . .	55	..	..	4	"	21,	Door to elevator, . . . . .	Complied
Keystone Wall Paper Company, .	Wall paper, . . . . .	77	..	..	9	"	23.		
James Connelly & Son, . . . . .	Cotton goods, . . . . .	15	55	..	..	"	23,		
Price, Sherman & Co., . . . . .	Hats, . . . . .	160	55	..	10	"	23.		
John Greer & Co., . . . . .	Woolen goods, . . . . .	90	50	..	11	"	24,	Door to elevator, . . . . .	Complied.
John Williams, Jr., . . . . .	Cotton and woolen goods, . .	65	35	..	8	"	24.		
Samuel B. Bunting, . . . . .	" " " " " " " " " " " "	26	14	..	..	"	24.		
A. M. Patton, . . . . .	" " " " " " " " " " " "	40	60	..	3	"	24,	Belt to box, . . . . .	Complied.
Campbell & Elliott, . . . . .	" " " " " " " " " " " "	110	340	..	30	"	24.		
R. Granlees & Son, . . . . .	" " " " " " " " " " " "	42	78	..	2	"	25,	Two large belts to box. . . . .	Complied.
Arlington Mills, . . . . .	Ginghams, . . . . .	3	32	..	..	"	25.		
Geo. C. Hetzel & Co., . . . . .	Cotton and woolen goods, . .	85	175	..	24	"	25.		
Oxford Mills, . . . . .	" " " " " " " " " " " "	15	24	..	..	"	25.		
James Brison & Co., . . . . .	" " " " " " " " " " " "	8	35	..	1	"	25.		
John C. Watt, Agent, . . . . .	" " " " " " " " " " " "	40	60	..	2	"	25.		
Wm. Thornton & Co., . . . . .	Carpet yarns, . . . . .	22	15	..	7	"	30		
John Crompton & Co., . . . . .	Paper boxes, etc., . . . . .	20	80	..	4	"	30.		

Wm. Hunter, Jr., & Co., . . . . .	Glimps, . . . . .	2	36	11	..	May	1.		
Day Brethaupt, . . . . .	Paper boxes, . . . . .	2	18	4	..	1.	1.		
Royal Shirt Factory, . . . . .	Shirts, . . . . .	100	321	37	..	2.	2.	Safety device suggested, . . . . .	Complied.
James Wilson & Sons, . . . . .	Carpets, blankets and red law tapes, . . . . .	17	100	15	..	2.	2.		
Times Finishing Works, . . . . .	Finishing goods, . . . . .	22	6	6	..	2.	2.		
Fels & Co., . . . . .	Toilet soaps, etc., . . . . .	23	30	3	..	2.	2.		
Wm. P. Datz & Bro., . . . . .	Paper boxes, . . . . .	16	55	18	..	13.	13.	Elevator doors to be changed, . . . . .	Complied.
Daniel Shirt Factory, . . . . .	Shirts, . . . . .	10	60	..	..	13.	13.		
Samuel R. Read, . . . . .	Shoes, . . . . .	25	10	2	..	26.	26.		
Victoria Mills, . . . . .	Cotton and silk goods, . . . . .	30	50	3	..	26.	26.		
Powell & Bro., . . . . .	Hosiery, . . . . .	60	300	81	..	27.	27.		
Tracy Worsted Mills, . . . . .	Worsted yarns, . . . . .	150	300	29	..	27.	27.		
Coaquanock Mills, . . . . .	Cashmere, etc., . . . . .	120	104	24	..	28.	28.		
Angora Mill No. 2, . . . . .	Cotton yarns, . . . . .	40	80	14	..	28.	28.	Rail on the connecting rod and safety device around elevator, . . . . .	Complied.
West End Flannel Mills, . . . . .	Flannel, . . . . .	150	150	8	..	28.	28.		
Angora Mill No. 1, . . . . .	Woolen goods and yarns, . . . . .	100	200	42	..	28.	28.		
J. C. Graham, . . . . .	Upholstery goods and dress trimmings, . . . . .	52	100	16	..	June	3.		
John T. Bailey & Co., . . . . .	Bags, ropes and twine, . . . . .	169	226	16	..	3.	3.		
National Optical Company, . . . . .	Eye glasses and spectacles, . . . . .	115	45	14	..	3.	3.		
Oxford Carpet Mills, . . . . .	Carpets, . . . . .	75	75	..	..	5.	5.		
Waterloo Hosiery Mill, . . . . .	Hosiery, . . . . .	30	130	40	..	5.	5.		
Jefferson Flint Glass Works, . . . . .	Glasware, . . . . .	214	16	26	..	6.	6.	Gates to elevator, . . . . .	Complied.
Allegheny Worsted Mill, . . . . .	Worsted yarns, . . . . .	13	14	18	..	6.	6.		
Philadelphia City Pottery, . . . . .	Earthenware, . . . . .	121	29	9	..	6.	6.	Insufficient number of water closets, . . . . .	Complied.
James Long Bro. & Co., . . . . .	Cloth and dress goods, . . . . .	94	81	7	..	9	9		
John Wyeth & Bro., . . . . .	Chemists, . . . . .	75	175	..	..	10.	10.		
Crescent Knitting Mills, . . . . .	Hosiery and knitting, . . . . .	4	56	16	..	10.	10.		

## STATISTICS OF FACTORIES—PHILADELPHIA—Continued.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured.	NUMBER EMPLOYED.			Sanitary condition.	Date of inspection.	Orders given.	Compliance.
		Males.	Females.	Under 12.	12 to 16.			
Joseph P. Murphy, . . . . .	Dress, cotton and woolen goods.	200	300	..	40	June 11.		
Joseph T. Smith & Co., . . . . .	Worsted yarns, . . . . .	5	25	..	1	27.	Fire escape and hoist doors to be guarded, . . .	Complied.
David Jackson, . . . . .	Carpets, . . . . .	50	25	..	2	27.		
T. A. Bachman, . . . . .	Dress goods, . . . . .	30	40	..	1	July 1.	Comply with section 2, . . . . .	Complied.
Phoenix Carpet Mill, . . . . .	Carpets, . . . . .	9	10	..	..	8.		
Continental Knitting Mill, . . . . .	Knit goods, . . . . .	10	35	..	..	8.		
J. Dalton & Bro., . . . . .	Woolen and merino yarns, . .	30	10	..	10	8.		
Columbia Mills, . . . . .	Carpets, . . . . .	35	15	..	..	8.		
W. J. Hamilton, . . . . .	Chemille, . . . . .	27	25	..	13	9.		
Cameron & Zimmerman, . . . . .	Damask goods, . . . . .	21	19	..	6	Bad, ..		
Henry Dickel & Son, . . . . .	Carpets, . . . . .	20	30	..	6	Good,	Water closets ordered; hoist doors to be guarded.	
Matthew Murphy, . . . . .	Bindings and bead lace, . . .	8	22	..	8	9.	Belts to box, . . . . .	Complied.
I. C. Woodhead, . . . . .	Shawls and damask goods, . .	4	25	..	..	9.		
Thos. Buck & Co., . . . . .	Hosiery, . . . . .	6	14	..	1	10.		
Amber Carpet Mills, . . . . .	Carpets, . . . . .	74	25	..	1	10.		
Lockwood Carpet Mill, . . . . .	.. . . . .	9	13	..	..	10.	Clean water closets; erect fire escape, . . . . .	Complied.
Hartley & Hanson, . . . . .	Rugs, . . . . .	22	9	..	3	10.		
A. H. Wirtz, . . . . .	White metal goods, . . . . .	140	20	..	9	14.	Clean water closets, . . . . .	Complied.
S. D. Wright & Co., . . . . .	Silk worsted and cotton yarns,	5	35	..	4	15.		
Black Diamond File Works, . . . .	Files, etc., . . . . .	175	60	..	28	15.	Rail hatchway and guard belt, . . . . .	Complied.



John Sidebotham, . . . . .	Tapes and wicks, . . . . .	2	10	4	15.
Philadelphia Paper Box Company, .	Boxes, etc., . . . . .	8	34	5	15.
Wolf & Randolph, . . . . .	Chemicals, . . . . .	30	29	..	16.
George Brisch & Co., . . . . .	Confectionery, . . . . .	13	22	..	16.
Armstrong, Craig & Co., . . . . .	Paper bags, . . . . .	30	20	1	16.
Pearl Knitting Works, . . . . .	Ladies' knit underwear, . . . . .	2	28	2	16.
W. J. Callahan, . . . . .	Hats, . . . . .	20	28	1	17.
Fletcher & Co., . . . . .	Felt Hats, . . . . .	58	26	1	17.
Geo. Miller & Son, . . . . .	Confectionery, . . . . .	75	75	6	17.
Frank Schoble & Co., . . . . .	Hats, . . . . .	34	20	..	21.
D. M. Redmond & Co., . . . . .	Umbrella frames, etc., . . . . .	45	25	2	21.
Henry H. Roeloff, . . . . .	Hats, . . . . .	100	28	..	21.
Manhattan Mills, . . . . .	Cotton and woolen goods, . . . . .	6	29	1	22.
Patent Metal Company, . . . . .	Patent metal, . . . . .	38	21	3	22.
Hoopes & Townsend, . . . . .	Bolts, rivets, etc., . . . . .	650	..	175	23.
A. Taylor & Sons, . . . . .	Hosiery, . . . . .	3	23	9	23.
Centennial Carpet Mill, . . . . .	Carpets and rugs, . . . . .	100	50	..	28.
Itchner & Co., . . . . .	Silk, . . . . .	151	112	13	30.
Philadelphia Knitting Mills Co., . .	Silk hosiery, . . . . .	8	15	..	30.
B. Hooley & Son, . . . . .	Sewing silk, . . . . .	53	4	10	31.
W. B. Hackenberg & Co., . . . . .	" . . . . .	15	85	1	31.
Saranac Silk Mill, . . . . .	Upholstery and dress trim- mings, . . . . .	58	90	17	31.
J. D. Orme & Co., . . . . .	Fancy knit goods, . . . . .	1	24	7	31.
Victoria Mills, . . . . .	Carpets, . . . . .	30	25	2	Aug.
Louis Weber, . . . . .	Hosiery, . . . . .	15	60	21	Good.
Oak Mills Company, . . . . .	" . . . . .	50	200	35	6.
Richmond Hosiery Mill, . . . . .	" . . . . .	45	80	40	7.
Crescent Mill, . . . . .	" . . . . .	23	90	19	7.

Fire escape ordered.

Make elevator gates more secure, . . . . .  
Post notices on wall leading to fire escape, and  
also on water closet doors.

Comply with sections 2, 7, 9, 10, 11, 18, . . . . .

Roll engine, and box one belt, . . . . .

Complied.

Complied.

Complied.

Complied.

## STATISTICS OF FACTORIES—PHILADELPHIA—Continued.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured.	NUMBER EMPLOYED.			Sanitary condition.	Date of inspection.	Orders given.	Compliance.
		Males.	Females.	Under 12.	12 to 16.			
Simpson & McAllister, . . . . .	Carpets, . . . . .	35	15	..	8	Aug. 9.	Comply with sections 2 and 10, . . . . .	Complied.
Diamond Carpet Mill, . . . . .	" . . . . .	45	80	..	3	8.	Gate to elevator; iron bar from door to fire escape; and cleanse water closets.	"
Hornor Brothers, . . . . .	" . . . . .	325	125	..	106	11.	Comply with sections 1, 7 and 10, . . . . .	Complied.
Phillip Doerr & Sons, . . . . .	" . . . . .	30	135	..	8	11.	Gates to elevator and floor openings, . . . . .	"
Pennsylvania Hosiery Company, . . . . .	Knit goods and hosiery, . . . . .	100	350	..	92	11.		
Feister Printing Company, . . . . .	Printing, etc., . . . . .	53	56	..	41	11.		
Caledonia Mill No. 2, . . . . .	Yarn spinning, . . . . .	35	150	..	25	12.	Gates to elevator, . . . . .	Complied.
Pequea Mills, . . . . .	Cotton and woolen goods, . . . . .	530	450	..	77	12.	Hand rails on stairway; belts to be guarded; and comply with section 18.	"
James Conaway & Co., . . . . .	Umbrella frames, etc., . . . . .	115	110	..	8	12.		
Novelty Paper Box Company, . . . . .	Paper boxes, . . . . .	35	20	..	12	12.	Gates to elevator; comply with section 10, . . . . .	Complied.
Hayes-Partridge Shoe Company, . . . . .	Shoes, . . . . .	74	50	..	17	14.	Gates to elevator, . . . . .	"
Thos. J. Mustin & Co., . . . . .	Knit goods, . . . . .	10	140	..	16	14.	Gate to elevator.	"
John Mundell & Co., . . . . .	Children's shoes, . . . . .	287	190	..	45	14.	Comply with sections 2 and 18, . . . . .	Complied.
Gibbon Brothers, . . . . .	Ladies' shoes, . . . . .	42	18	..	3	14.	Comply with sections 2 and 18, . . . . .	"
Jos. Barnhurst Estate, . . . . .	Umbrella frames, etc., . . . . .	72	85	..	33	15.		
Scott Manufacturing Company, . . . . .	Hosiery and underwear, . . . . .	23	89	..	6	15.		
Bach & Co., . . . . .	Cigars, . . . . .	14	36	..	7	15.		
Baldwin Locomotive Works, . . . . .	Machine shop, . . . . .	505	..	..	2	18.		
Baldwin Locomotive Works, . . . . .	Locomotives, . . . . .	602	..	..	6	18.		

872	2	14	18.
Baldwin Locomotive Works, . . . . .			18.
Baldwin Locomotive Works, . . . . .	384	2	18.
Baldwin Locomotive Works, . . . . .	57		18.
Baldwin Locomotive Works, . . . . .	126	6	18.
Baldwin Locomotive Works, . . . . .	399	2	18.
Baldwin Locomotive Works, . . . . .	724	7	18.
Baldwin Locomotive Works, . . . . .	651	2	18.
Baldwin Locomotive Works, . . . . .	40	5	18.
Baldwin Locomotive Works, . . . . .	35	2	18.
D. & W. Ring, . . . . .	21	6	19.
Brown Bros. & Aberle Co., . . . . .	60	31	20.
Barnes & Beyer, . . . . .	150	79	20.
Montgomery Mills, . . . . .	63	5	22.
Reading Screw Company, . . . . .	36	14	21.
Ricketts & Prince, . . . . .	18	12	21.
E. C. Read, . . . . .	15	10	22.
Rowland & Schmidt, . . . . .	52	50	22.
Greenhalgh & Wadsworth, . . . . .	5	25	22.
William Rhodes, . . . . .	8	10	22.
Robert Lewis, . . . . .	51	16	22.
Lockhart Bros., . . . . .	8	18	22.
Manhattan Mills, . . . . .	20	60	22.
Joseph P. Murphy, . . . . .	50	50	22.
Zeigler Bros., . . . . .	300	225	22.
John Scanlan & Son, . . . . .	14	86	22.
Fred. Rumpf & Bro., . . . . .	80	45	22.
Craven & Dearnly, . . . . .	150	200	22.
Getty & Spratt, . . . . .	30	20	22.

Comply with section 2, . . . . .  
 Repair hand-railing to fire escape; also provide  
 additional fire escape.  
 Gates to elevator. . . . .

Complied.  
 ..  
 ..

Gate to elevator, . . . . .  
 ..  
 ..

Complied.  
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Comply with section 10. . . . .  
 ..  
 ..

Complied.  
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One belt to box, . . . . .  
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Complied.  
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Gate to elevator, . . . . .  
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Complied.  
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July  
 June 11.  
 Mar. 21.  
 Aug. 25.  
 25.  
 25.  
 26.

## STATISTICS OF FACTORIES—PHILADELPHIA—Continued.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured.	NUMBER EMPLOYED.			Sanitary condition.	Date of inspection.	Orders given.	Compliance.
		Males.	Females.	Under 12. 12 to 16.				
M. Elkin & Co., . . . . .	Shoes. . . . .	100	30	1	Good.	Aug. 26.		
Dickey & McMaster, . . . . .	Carpets, . . . . .	28	10	1	"	26.		
Star Crescent Mills Company, . . . .	Cotton goods dyeing, . . . . .	55	45		"	29.		
Berwick & Weed, . . . . .	Woolen goods, . . . . .	45	15		"	29.		
Hoyle, Harrison & Kaye, . . . . .	Upholstery and curtains, etc., . . . .	215	175	80	"	29.		
Black Diamond File Works, . . . . .	Files, . . . . .	175	60	30	"	Sept. 19.		
Johnson & Wolf, . . . . .	Carpets, . . . . .	10	13	1	"	19.		
William T. Smith, . . . . .	Rugs and carpets, . . . . .	230	150	60	"	15.		
Henry Dickel & Son, . . . . .	Carpets, . . . . .	20	30	3	"	15.		
Cameron & Zimmerman, . . . . .	Upholstery goods, . . . . .	20	20	8	"	15.		
J. E. Jefford & Co., . . . . .	Wares, . . . . .	131	29	11	"	15.		
Saranac Silk Mills, . . . . .	Upholstery goods, . . . . .	58	90	17	"	16.		
A. H. Wirtz, . . . . .	White metal goods, . . . . .	107	44	6	"	16.		
W. B. Hackenberg & Co., . . . . .	Sewing silk, . . . . .	15	85	1	"	16.		
Craven & Dearnly, . . . . .	Woolen and worsted yarns, . . . . .	76	164	73	"	24.		
John Blood & Co., . . . . .	Hosiery, . . . . .	100	400	170	"	24.		
Albion Mills, . . . . .	Carpets, . . . . .	225	125	10	"	24.		
Robert Beatty, . . . . .	Cotton, yarns, . . . . .	55	50	11	"	26.	Erect two fire escapes, . . . . .	Complied.
Columbia Carpet Mill, . . . . .	Carpets, . . . . .	20	30	1	"	26.	Comply with sections 7 and 12, . . . . .	"
Caterson, Brotz & Co., . . . . .	Cards, . . . . .	5	15		"	26.		



		45	85	4	"	26.	
Moore Alpaca Company, . . . . .	Cotton and woolen goods, . .	15	30	3	"	29.	
Columbia Mills, . . . . .	"	2	11	2	"	29.	
James M. Beatty, . . . . .	Knit underwear, . . . . .	25	50	6	"	Oct.	
T. A. Bachman, . . . . .	Dress goods, . . . . .	40	65	25	"	1.	Complied.
Atlas Knitting Mill, . . . . .	Hosiery and knit goods, . .	20	35	5	"	1.	
Joseph A. Beggs, . . . . .	Chenille curtains, . . . . .	30	30	3	"	1.	
R. J. Stinson, . . . . .	Carpets, . . . . .	40	140	1	"	1.	Comply with sections 1 and 12.
Alfred Oliver, . . . . .	Knit goods and hosiery, . .	3	10	2	"	2.	
National Button Works, . . . . .	Covered buttons, . . . . .	232	16	28	"	2.	
Jefferson Flint Glass Works, . . . . .	Lamp chimneys, . . . . .	15	50	"	"	2.	
James Hogg, . . . . .	Hosiery, . . . . .	10	30	"	"	2.	
C. & F. Boulter, . . . . .	"	120	130	14	"	3.	Comply with section 10.
Hampden Mills, . . . . .	Dress goods, . . . . .	40	60	18	"	3.	
Robt. J. & R. Ritchie Company, . . . . .	Silk goods, . . . . .	240	100	8	"	3.	
Monitor Carpet Mill, . . . . .	Carpets, . . . . .	125	150	38	"	3.	
Park Carpet Mills, . . . . .	"	100	100	9	"	3.	
Star Carpet Mills, . . . . .	"	6	10	1	Fair,	6.	Comply with sections 2 and 10
Meisle Manufacturing Company, . . . . .	Wood toilet boxes, . . . . .	87	13	2	Good,	6.	Comply with sections 2 and 7.
Blumenthal & Co., . . . . .	Clothing, . . . . .	150	150	11	"	7.	
Wm. Ayers & Son, . . . . .	Horse clothing, . . . . .	13	13	"	"	7.	
G. W. Emlen, . . . . .	Cotton and woolen dress goods	800	"	40	"	7.	
Enterprise Manufacturing Company, . . . . .	Hardware specialties, . . . .	90	35	1	"	7.	Complied.
Keystone Carpet Mills, . . . . .	Carpets, . . . . .	590	"	33	"	8.	Complied.
McNeely & Co., . . . . .	Morocco, . . . . .	32	180	20	"	8.	
Sanguoit Silk Mill, . . . . .	Silk, . . . . .	200	300	108	"	9.	
American Knitting Mill, . . . . .	Hosiery, . . . . .	105	120	35	"	9.	
Phillip Wunderle, . . . . .	Candles, . . . . .	128	22	7	"	9.	
L. Narx, . . . . .	Smoking pipes, . . . . .	12	62	"	"	10.	
Jas. S. Mason Company, . . . . .	Shoe blacking, . . . . .						

## STATISTICS OF FACTORIES—PHILADELPHIA—Continued.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured.	NUMBER EMPLOYED.			Sanitary condition.	Date of inspection.	Orders given.	Compliance.
		Males.	Females.	Under 12. 12 to 16.				
Krecker & Co., . . . . .	Paper boxes, . . . . .	3	25	..	Good,	Oct. 10,	Put fire escape in good condition.	Compliance.
Sheip & Vandergrift, . . . . .	Cigar boxes, . . . . .	82	26	..	"	10,	Comply with sections 2 and 12, . . . . .	Complied.
Enterprise Carpet Works, . . . . .	Carpets, . . . . .	24	10	..	"	15,		
Bechman, Carvell & Co., . . . . .	Silk, mohair and plush, . . . . .	7	21	..	"	15,	Comply with sections 2 and 18, . . . . .	Complied.
J. M. Schwehn, . . . . .	Hair cloth and upholstery goods, . . . . .	14	14	..	"	15,	"	"
J. H. Zellin & Co., . . . . .	Medicines, . . . . .	7	18	..	"	16,		
John Williams, Jr., . . . . .	Cotton and woolen goods, . . . . .	40	75	..	"	16,		
John Wyeth & Bro., . . . . .	Chemists, . . . . .	91	166	..	"	16,		
Fleisher Worsted Works, . . . . .	Yarns and braids, . . . . .	100	200	..	"	17,		
Keystone Publishing Company, . . . . .	Printing, etc. . . . .	37	26	..	"	17,		
J. C. Graham & Co., . . . . .	Upholstery goods, . . . . .	50	200	..	"	17,	Complied with sections 7 and 12, . . . . .	Complied.
E. A. Godshalk & Co., . . . . .	Knit goods, . . . . .	400	450	..	"	17,		
Henry H. Roeloff & Co., . . . . .	Hats, . . . . .	121	46	..	"	28,	Comply with section 12.	
Burgen & Sons, . . . . .	Glass bottles, . . . . .	175	..	6	"	28,	Comply with sections 2 and 3, . . . . .	Complied.
Stinson Bros. & Kurlbaum, . . . . .	Carpets, . . . . .	297	160	..	Fair,	Nov. 3,	Comply with sections 1, 3, 10 and 12, . . . . .	"
Orinoka Mills, . . . . .	Silk upholstery goods, . . . . .	100	150	..	Good,	5,	Comply with section 7, . . . . .	"
Harrison Carpet Mills, . . . . .	Carpets, . . . . .	120	100	..	"	7,		
J. H. Klauder, . . . . .	Jersey cloth, . . . . .	120	100	..	"	7,		
Thomas Huston, . . . . .	Carpets, . . . . .	20	50	..	"	7,		

		120	1	2	30	7	Comply with sections 2 and 3.	Compiled.
Dyottsville Glass Works.	Bottles.	120	..	..	..	..	..	..
Pilling & Madeley.	Hosiery and underwear.	150	650	..	200	..	..	10.
Franklin Carpet Mills.	Carpets.	35	75	..	7	..	..	10.
James Kitchenman.	Carpet and carpet yarns.	100	100	..	6	..	..	10.
W. H. Lees.	Cotton and woolen goods.	8	22	..	..	..	..	10.
Albert E. Schofield.	Cotton yarn.	14	8	..	4	..	..	10.
Washington Mills.	Woolen and worsted yarns.	61	9	..	5	..	..	11.
Washington Flint Glass Company.	Globes and shades.	217	8	..	75	..	..	11.
Standard Worsted Mills.	Weaving and spinning.	49	100	..	13	..	..	11.
Bromley Manufacturing Company.	Curtains.	100	400	..	100	..	..	11.
J. W. Boughton.	Wood carpet, wire screens.	142	..	..	7	..	..	12.
Hero Fruit-Jar Company.	Glass jars and tin cans.	540	60	..	160	..	..	12.
Textile Mills.	Dress goods.	15	10	..	1	..	..	17.
Continental Worsted Mills.	Worsted yarns.	200	400	..	200	..	..	17.
Victoria Mills.	Fine dress goods.	15	70	..	7	..	..	17.
Justice, Koch & Co..	Cardigan jackets and knit goods.	56	100	..	34	..	..	19.
Black Diamond File Works.	Files.	229	50	..	50	..	..	19.
Universal Hosiery Mills.	Hosiery.	20	50	..	16	..	..	19.
Tildary Mills.	Chenille curtains.	12	13	..	5	..	..	20.
Ruddington Knitting Mills.	Hosiery.	30	100	..	11	..	..	20.
Continental Knitting Mill.	Knit goods.	10	25	..	1	..	..	20.
E. Vaughan.	Hosiery.	15	30	..	12	..	..	20.
Audurance Mill.	Cotton goods.	45	80	..	10	..	..	21.
Craven & Dearnley.	Worsted and woolen yarns.	92	182	..	78	..	..	21.
Cambria Carpet Mills.	Carpets.	99	75	..	9	..	..	21.
Rock Carpet Mills.	Carpets and rugs.	35	45	..	1	..	..	21.
John Bromley & Sons.	Rugs.	625	75	..	100	..	..	24.
Stewart, Ralph & Co..	Snuff.	57	26	..	..	..	..	24.

Comply with sections 2, 3 and 18.

Compiled.

## STATISTICS OF FACTORIES—PHILADELPHIA—Continued.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured.	NUMBER EMPLOYED.			Sanitary condition.	Date of inspection.	Orders given.	Compliance.
		Males.	Females.	Under 12. 12 to 16.				
Thomas Dolan & Co. . . . .	Woolen yarn spinning, . . . .	200	50	..	63	Nov. 24.		
A. M. Collins & Co., . . . . .	Cards, . . . . .	150	100	..	100	24.		
Robert Blood, . . . . .	Hosiery, . . . . .	8	64	..	24	24.	Comply with section 2, . . . . .	Complied.
S. Vernon, . . . . .	" . . . . .	10	40	..	8	24.	Place gates on each floor opening of the elevator.	
Scherr Bros., . . . . .	Silk ribbons, . . . . .	32	25	..	..	25.		
Way Manufacturing Company, . .	Underwear, . . . . .	60	80	..	10	25.		
Eagle Hosiery Mills, . . . . .	Hosiery, . . . . .	8	25	..	4	25.		
Victoria Knitting Mill, . . . . .	Jersey cloth and knit goods, . .	25	260	..	38	25.		
John B. Stetson & Co., . . . . .	Hats, . . . . .	835	165	..	46	25.		
Jos. Welsh & Son, . . . . .	Cotton and woolen goods, . .	75	50	..	3	25.		
Jos. Adamson & Co., . . . . .	Webbings, . . . . .	25	175	..	30	25.		
Tioga Mills, . . . . .	Cotton hosiery yarns, . . . .	25	11	..	13	25.	Cleanse and designate water closets; also place wire screens around railing of fire escape.	
Jos. Black & Sons, . . . . .	Hosiery, . . . . .	35	125	1	58	28.	Dismiss one child under 12, . . . . .	Complied.
Robertson & Hall, . . . . .	Carpets, . . . . .	31	17	..	1	28.		
Matthew Murphy, . . . . .	Stay bindings, . . . . .	8	20	..	4	28.		
W. J. Hamilton, . . . . .	Chenille curtains . . . . .	28	28	..	13	28.		



## FRANKFORD, PHILADELPHIA, PA.

Frankford Hosiery Mill.	Hosiery.	140	140	63	Good.	April 15,	One belt to box.	Complied.
Wm. Whitaker & Sons.	Ingrain carpets.	90	90	23	..	16.	..	..
Charles Cranshaw.	Cotton and woolen goods.	12	15	2	..	16.	..	..
Longdell Mills.	Cotton goods.	75	100	9	..	16.	..	..
S. W. Evans & Son.	Brass fixtures.	150	100	56	..	16.	..	..
James Pollock.	Quilts, etc.	20	30	2	..	17.	..	..
Robert Dallas.	Cotton and woolen weaving.	7	26	2	..	17.	..	..
Clark & O'Neal.	Damask weaving, etc.	2	36	2	..	17.	..	..
Berkshire Manufacturing Company.	Cotton goods.	125	200	7	..	17.	..	..
Emerald Mills.	Cloth.	75	150	9	..	18.	..	..
Winghocking.	Spinning yarns.	42	28	8	..	22.	..	..
Samuel J. Campbell.	Worsted and cotton goods.	35	35	..	..	22.	Belt to box ; door to elevator.	Complied.
Malcolm Mills Company.	Fancy yarns.	8	20	6	..	22.	..	..
Caldwell. Antrim & Co..	Umbrellas and parasols.	10	20	..	..	22.	Door to elevator.	Complied.
Eastlake Manufacturing Company.	Gimps.	15	20	..	..	22.	..	..
Frogmore Mill.	Cotton spinning.	40	15	8	..	22.	..	..
Wm. Whitaker & Sons.	Cotton goods.	72	73	21	..	23.	..	..
Samuel Campbell & Co..	Cotton and woolen goods.	15	10	1	..	July 11.	..	..
Almsworth & Conner.	..	9	18	..	..	11.	..	..
Meadow Spring Print and Dye Wks.	Printing, cleaning, etc.	60	..	11	..	11.	..	..
Aramingo Mills.	Damask gingham, etc.	40	50	6	..	11.	..	..
Meadow Spring Works.	Printing and stamping.	60	..	14	..	Sept. 22.	Post names and keep register of same.	Complied.
Aramingo Mills.	Ginghams and damask.	35	40	5	..	22.	Post and keep register of names and box pulley.	..
Robert Megowen.	Cotton goods.	10	16	1	..	Nov. 13.	..	..
Emerald Woolen Mill.	Woolen and worsted goods.	75	125	9	..	13.	..	..
Robert Dallas.	Cotton and woolen goods.	8	36	..	..	13.	..	..
Berkshire Mills.	Cotton goods.	100	250	9	..	13.	..	..

## STATISTICS OF FACTORIES—BRIDESBURG, PHILADELPHIA.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured.	NUMBER EMPLOYED.				Sanitary condition.	Date of inspection.	Orders given.	Compliance.
		Males.	Females.	Under 12.	12 to 16				
R. O. Moorhouse, . . . . .	Paper. . . . .	90	14	..	..	Good.	April 18.		
Lenox Mills, . . . . .	Upholstery and cotton goods.	19	45	..	2	"	18.		
Edwin H. Fidler & Co., . . . . .	Rope, cordage, etc., . . . . .	389	111	..	52	"	18,	Gate to elevator, . . . . .	Complied.
Mason Fruit Jar Company, . . . . .	Jars, etc., . . . . .	240	35	..	27	"	July 17,	Door to elevator, . . . . .	"
Mason Fruit Jar Company, . . . . .	" . . . . .	265	35	..	22	"	Sept. 19.		
R. O. Moorhouse, . . . . .	Paper. . . . .	52	45	..	..	"	19.	Comply with sections 10 and 12, . . . . .	Complied.

## MANAYUNK, PHILADELPHIA.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured.	NUMBER EMPLOYED.				Sanitary condition.	Date of inspection.	Orders given.	Compliance.
		Males.	Females.	Under 12.	12 to 16				
Mount Vernon Worsted Mill, . . . . .	Worsted yarns, . . . . .	100	300	..	162	Good.	Jan. 24.		
Shaw & Bowers, . . . . .	Cotton and woolen yarns. . . . .	25	8	..	..	"	Feb. 25.		
J. Ripka & Co. . . . .	Lowell dress goods, . . . . .	40	15	..	3	"	25.		
Wabash Mills, . . . . .	Cotton carpet yarns, . . . . .	31	8	..	..	"	25.		
Pekin Mills, . . . . .	Cotton and woolen goods, . . . . .	45	80	..	12	"	25.		
Arcola Mills, . . . . .	Woolen goods and yarns, . . . . .	65	15	..	..	"	25.	Belt to box, . . . . .	Complied.
Frank E. Patterson, . . . . .	Cotton yarns, . . . . .	36	9	..	17	"	26.	Gates to elevator; belt to box; fire escape to be changed.	"
Missouri Mills, . . . . .	Blanket and carpet yarns, . . . . .	56	11	..	..	"	..	Repair elevators, . . . . .	"
Blantyre Mills, . . . . .	Woolen goods, . . . . .	116	24	..	10	"	April 29.		

West Economy Mills, . . . . .	..	..	..	300	..	35	..	29,	Three belts to box, and floor to be patched. . .	Complied.
East Economy Mills, . . . . .	Worsted spinning.	83	..	115	..	68	..	29,	Platform to be refloored, and floor in mill to be patched.	"
Eagle Mill, . . . . .	Woolen goods.	205	..	96	..	13	..	29,	Two belts to be boxed, . . . . .	"
A. Campbell Manufacturing Co., .	Cotton and woolen yarns, . .	80	..	110	..	68	..	May		
A. Campbell Manufacturing Co., .	Cotton and silk goods, . . . .	40	..	60	..	7	..	7,		
Pittsfield Mills, . . . . .	Woolen, cotton and silk goods.	30	..	70	..	6	..	7,	Two belts to box, . . . . .	Complied.
A. Platt & Bro., . . . . .	Cotton and woolen goods, . .	105	..	20	..	12	..	7,		
Wm. Clegg, . . . . .	..	18	..	20	..	6	..	8,		
Wm. Holt & Son, . . . . .	Woolen yarns, . . . . .	59	..	6	..	6	..	8,		
Rogers' Mill, . . . . .	Woolen goods, . . . . .	80	..	80	..	4	..	8,		
Arcola Mills, . . . . .	Carpet-backing and yarns, . .	76	..	16	..	..	..	Aug. 28,		
Eagle Mills, . . . . .	Woolen goods, . . . . .	208	..	208	..	22	Fair,	28,	Comply with sections 2, 7, 10 and 12.	
Ripka Mill No. 2, . . . . .	Cotton and woolen goods, . .	35	..	70	..	12	Good,	28,		
S. A. Rudolph, . . . . .	Paper, . . . . .	50	..	15	..	..	..	28,	Comply with sections 7 and 18.	

ROXBOROUGH, MANAYUNK.

Freeland Mills, . . . . .	Carpet yarns, . . . . .	49	16	..	6	Good,	May	9.		
Roxborough Mills, . . . . .	Cotton and woolen goods, . .	35	75	..	9	Poor,		9,	Water closets ordered cleaned. . . . .	Complied.

GERMANTOWN, PHILADELPHIA.

Conyers, Button & Co., . . . . .	Hosiery, . . . . .	100	200	..	20	Good,	May	12.		
Columbia Mills, . . . . .	Hosiery and underwear, . . .	60	100	..	10	..		12.		
Franklin Yarn Mills, . . . . .	Cotton, woolen and merino wear.	35	5	..	6	..		12.		
Jos. Seatchard's Sons, . . . . .	Woolen and merino yarns, . .	98	2	..	48	..		14.		

## STATISTICS OF FACTORIES—GERMANTOWN—Continued.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured.	NUMBER EMPLOYED.			Sanitary condition.	Date of inspection.	Orders given.	Compliance.
		Males.	Females.	Under 12. 12 to 16.				
Arnett Mills, . . . . .	Woolen and merino yarns, .	51	6	4	Good.	May 14.		
H. G. Campion, . . . . .	Knit goods, . . . . .	10	40	11	"	14.		
Leicester Mill, . . . . .	Knitting and hosiery, . . . .	170	180	15	"	14.		
B. Hamill & Co., . . . . .	Woolen and merino yarns, .	54	6	8	"	14.		
John Ballantyne, . . . . .	Hosiery, . . . . .	20	40	5	"	15.		
Rainbow Knitting Mills, . . . .	Fancy knit goods, . . . . .	11	24	..	"	15.		
Charles Chipman & Son, . . . . .	Hosiery, . . . . .	100	150	25	"	15.		
Industry Knitting Mill, . . . . .	Hosiery and knit goods, . . . .	40	40	17	"	15.	Two large belts to be boxed. . . . .	Complied.
Standard Knitting Mill, . . . . .	Hosiery, . . . . .	55	35	26	"	15.	Belt to be boxed, and engine to be railed off, . .	"
M. Dalzell, . . . . .	" . . . . .	10	25	..	"	16.		
Lincoln Mills, . . . . .	" . . . . .	10	15	..	"	16.	Gates to be placed across outside hoist doors, . .	Complied.
Charter Hosiery Company, . . . .	" . . . . .	25	50	6	"	16.		
Thos. W. Fling & Bro., . . . . .	" . . . . .	6	11	..	"	16.	Gates to be placed across outside hoist doors, .	Complied.
Hinkley Mills, . . . . .	" . . . . .	50	100	4	"	20.		
Bellow Worsted Mill, . . . . .	Worsted yarns, . . . . .	80	80	3	"	20.	Bar ordered to hoist door, . . . . .	Complied.
J. & B. Allen, . . . . .	Fancy knit goods, . . . . .	100	300	6	"	20.		
Stenton Mills, . . . . .	" . . . . .	25	35	..	"	20.		
Wayne Mill, . . . . .	Dress goods, cloakings, etc., .	40	10	..	"	22.		
Atlantic Knitting Mill, . . . . .	Hosiery and underwear, . . . .	16	89	16	"	22.		
Bradford Mills, . . . . .	Spinning and worsted yarns, .	100	100	2 30	"	22.	Door ordered to elevator. . . . .	Complied.



	16	12	2	22.		22.	
Shireland Knitting Mills, . . . . .	Cardigan jackets, . . . . .	16	12	..	..	22.	
Joseph Smalley, . . . . .	Hosiery, . . . . .	18	16	..	July	24,	Complied.
Wingohocking Mill, . . . . .	Hosiery and jackets, . . . . .	50	200	..	..	24.	
Harrison & Mallaratt, . . . . .	Hosiery, . . . . .	4	14	..	..	24.	
Standard Hosiery Mill, . . . . .	.. . . . .	30	70	..	..	24.	
Atlantic Knitting Mill, . . . . .	Underwear, . . . . .	44	80	..	Nov.	26.	
Geruaintown Knitting Mill, . . . . .	Hosiery, . . . . .	45	115	3	..	26,	Comply with sections 2 and 3.
Charter Hosiery Company, . . . . .	.. . . . .	30	40	..	..	26.	
Chas. Chipman & Son, . . . . .	.. . . . .	75	150	..	..	26.	
Armat Mills, . . . . .	Woolen and merino yarns, . . . . .	50	15	..	..	26.	
Leicester Knitting Mills, . . . . .	Knit goods and cloakings, . . . . .	200	250	..	..	26.	
Standard Hosiery Mill, . . . . .	Hosiery, . . . . .	30	30	..	..	26.	

WEST PHILADELPHIA.

	41	15	13	Good,	June	20.
H. Whitely & Co., . . . . .	Cotton and woolen yarns, . . . . .	41	15	..	13	20.
Oriental Mills, . . . . .	Upholstery fabrics, . . . . .	126	62	..	12	20.
Goodenten Mills, . . . . .	Cotton and woolen yarns, . . . . .	18	7	..	3	20.
Penn Worsted Mills, . . . . .	Worsted yarns, . . . . .	40	70	..	10	20.
Providence Worsted Mills, . . . . .	.. . . . .	15	25	..	1	20.

## STATISTICS OF FACTORIES—BRISTOL, BUCKS COUNTY.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured.	NUMBER EMPLOYED.				Sanitary condition.	Date of inspection.	Orders given	Compliance.
		Males.	Females.	Under 12.	12 to 16.				
Wilson & Fennimore, . . . . .	Paper hangings, . . . . .	92	2	..	31	Good,	Jan. 31.		
Bristol Carpet Mill, . . . . .	Carpets and Smyrna rugs, . .	400	200	..	..	..	21.		
Providence Hosiery Mill, . . . . .	Hosiery, . . . . .	75	85	..	26	..	April 25.		
Bristol Mills, . . . . .	.. . . .	125	225	..	43	Poor,	15.	Belt to box; water closet for females. . . . .	Complied.
Bristol Worsted Mills, . . . . .	Worsted yarns. . . . .	75	175	..	68	Good,	15.		

## BRIDGEPORT, MONTGOMERY COUNTY.

Lannington Mills, . . . . .	Cotton and woolen goods, . .	62	80	..	8	Good,	June 17.	Two belts to box; door to elevator, . . . . .	Complied.
Rebecca Paper Mills, . . . . .	Paper and paper bags, . . .	30	11	..	1	..	17.	Clean water closets, . . . . .	..
James Lees & Son, Mill No. 4, 5, 6, .	Yarns, etc., . . . . .	143	225	..	50	Fair,	18.	Bars across hoist doors, and stairway to be re-	..
James Lees & Son, Mill No. 1, 2, 3, .	.. . . .	195	200	2	35	Good,	18.	paired.	..
Bridgeport Mills, . . . . .	Cotton and woolen yarns, . .	60	50	..	17	..	July 2,	Two belts to box. . . . .	..

## CARDINGTON, DELAWARE COUNTY.

Wolfenden, Shore & Co., . . . . .	Cloth, . . . . .	160	90	..	37	Good,	May 28,	Rail stairway, . . . . .	Complied.
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## STATISTICS OF FACTORIES—LENNI, DELAWARE COUNTY.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured.	NUMBER EMPLOYED.			Sanitary condition.	Date of inspection.		Orders given.	Compliance.
		Males.	Females.	Under 12.		July	7.		
Crozlers' Mill, . . . . .	Cotton goods, . . . . .	58	22	..	Good.				

## CHESTER, DELAWARE COUNTY.

South Chester Manufacturing Co.,	Cotton goods, . . . . .	27	28	..	7	Good.	April	7.	
Chester Dock Mills, . . . . .	" . . . . .	50	200	..	16	"		14.	
Lilley & Sons, . . . . .	Cotton and woolen goods, . .	65	60	..	14	Poor,		14.	Water closet for females, . . . . .
James Bower's Sons, . . . . .	Shoddy mills, . . . . .	20	25	..	1	Good,		14.	Door to elevator, . . . . .
Aberfrile Manufacturing Company,	Cotton and woolen goods, . .	100	200	..	4	"		14.	" . . . . .
Bardenock Mills, . . . . .	Hosiery and cotton yarns, . .	50	80	..	25	"	May	21.	" . . . . .
Phenix Woolen Mill, . . . . .	Worsted cloth suitings, . . .	60	40	..	18	"		23.	
Lincoln Mills, . . . . .	Cotton yarns, . . . . .	50	50	..	22	"		23.	
Grove Mills, . . . . .	Worsted yarns, . . . . .	16	56	2	16	"		23.	
Arasapha Mills, . . . . .	Cotton goods, . . . . .	140	140	..	40	"		23.	
Chester Manufacturing Company, .	Damask, Turkish and cotton goods,	54	41	..	5	"		23.	Sliding gate to elevator, . . . . .
Springfield Worsted Mills, . . . .	Worsted yarns, . . . . .	50	100	..	44	"		29.	Complied.
S. A. Crozier, . . . . .	Cotton wraps, . . . . .	27	42	..	15	"		29.	
Patterson Mills Company, . . . . .	Gloughams and cotton yarns, .	75	250	..	20	Fair,		29.	



Grove Mills.	Worsted yarns.	26	50	34	Good.	Sept. 23.	Post and keep register of names.	Complied.
Arasapha Company.	Cotton fabrics.	103	150	45	..	23.	Repair elevators, beiting, gearing, etc., and provide gates to floor openings.	..
Patterson Mills Company.	Cotton goods.	75	250	20	..	23.	Comply with sections 2, 10 and 18.	Complied.
James Bower's Sons.	Shoddy goods.	23	15	1	..	23.		
Irving & Leiper Manufacturing Co.	Wrap and hosiery yarn.	75	60	30	..	23.		
Lilley & Sons Manufacturing Co.	Cotton yarns.	66	80	29	..	23.		

FALLS OF SCHUYLKILL.

John & James Dobson.	Carpets and plush goods.	1, 100	1, 000	600	Good.	May 19.		
John Dobson.	Blankets and cloaks.	538	184	78	..	19.		
John & James Dobson.	Cloth.	31	35	8	..	19.		
John & James Dobson.	Carpets and plush goods.	639	1, 800	350	..	Nov. 14.		
John Dobson.	Blankets.	450	250	80	..	14.		
John & James Dobson.	Woolen goods.	100	60	20	..	14.	Insufficient means of egress in case of fire.	

CRESCENTVILLE, PHILADELPHIA.

Finley & Co.	Rope.	50	30	8	Good.	April 23.	Door to elevator.	Complied.
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NICETOWN, PHILADELPHIA.

John Greaves & Bro.	Cotton, woolen and merino goods.	23	5	6	Good.	May 22.		
Dalkeith Mills.	Cotton damasks.	41	64	8	..	22.	Railing to elevator.	Complied.
D. Barrows & Son.	Knit goods.	3	25	15	Fair.	July 29.	Water closets ordered.	
E. Noon & Son.	Hosiery.	20	20	..	Good.	29.		

## STATISTICS OF FACTORIES—NICTOWN, PHILADELPHIA—Continued.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured.	NUMBER EMPLOYED.				Sanitary condition.	Date of inspection.	Orders given.	Compliance.
		Males.	Females.	Under 12.	12 to 16.				
Nicetown Hosiery Mills, . . . . .	Hosiery, . . . . .	7	33	..	9	Good,	July 23.		
D. Barrows & Son, . . . . .	Knit goods. . . . .	3	25	..	19	"	Sept. 18.		
Dalkeith Mills, . . . . .	Damask goods, etc., . . . . .	112	..	..	8	"	18.		

## WAYNE JUNCTION, PHILADELPHIA.

Cope & Co., . . . . .	Cotton and worsted yarns, . . . . .	33	26	. . . . .	4	Good,	Feb. 21,	Gates to elevator, . . . . .	Complied.
New Glen Echo Mills, . . . . .	Carpets, . . . . .	175	175	. . . . .	76	"	21.		

## NORRISTOWN, MONTGOMERY COUNTY.

Hercules Cigar Factory, . . . . .	Cigars, . . . . .	75	50	. . . . .	16	Bad,	June 12,	Water closets ordered, and to protect elevator,	Complied.
Chester L. Smith Manufacturing Co., . . . . .	Shirts, . . . . .	2	138	. . . . .	8	Poor,	12.	Improve water closets, . . . . .	"
Keystone Hosiery Company, . . . . .	Hosiery, . . . . .	25	200	. . . . .	46	Good,	12,	Gates to holst doors, . . . . .	"
Norton Woollen Mills, . . . . .	Cloth, . . . . .	105	105	. . . . .	18	"	13.		
Globe Knitting Mill, . . . . .	Seamless hosiery, . . . . .	10	125	. . . . .	43	"	13.		
Reliance Hosiery Mll, . . . . .	Hosiery, . . . . .	4	27	. . . . .	10	"	13.		
Woodstock Woollen Mills, . . . . .	Cloth, . . . . .	10	15	. . . . .	2	"	17.		

Wm. Watt & Son, . . . . .	Woolen goods, . . . . .	40	50	4	July	2.	Fire escape ordered, . . . . .	Complied.
John C. Hathaway, . . . . .	Shirts, . . . . .	3	99	..	..	3.	..	..
Wyoming Mills, . . . . .	Cotton yarns, . . . . .	58	40	4	..	3.	Comply with section 2, . . . . .	..
Norristown Hosiery Mill, . . . . .	Hosiery, . . . . .	7	43	2	Aug.	1.	Water closets for females, . . . . .	..
A. B. Lyson & Bro., . . . . .	Shirts, . . . . .	3	37	1	..	1.	Ball engine, . . . . .	..
Norristown Hosiery Company, . . . . .	Hosiery, . . . . .	13	52	7	Fair,	18.	Water closets ordered.	
Tyson & Bro., . . . . .	Shirts, . . . . .	2	38	..	Good,	18.		
W. K. Gresh & Sons, . . . . .	Cigars, . . . . .	85	40	25	..	18.		
J. C. Hathaway, . . . . .	Shirts, . . . . .	3	97	4	..	18.		
Keystone Hosiery Mill, . . . . .	Hosiery, . . . . .	165	109	45	..	18.		
Chester L. Smith, . . . . .	Shirts, . . . . .	9	137	..	..	18.		

HOLMESBURG.

Pennsylvania Print Works, . . . . .	Printing and stamping, . . . . .	113	26	10	Good,	Aug. 13.	Comply with section 2, . . . . .	Complied.
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CONSHOHOCKEN, MONTGOMERY COUNTY.

Riverside Mill, . . . . .	Cotton goods, . . . . .	25	25	6	Fair,	July 18.	Clean water closets and post notices, . . . . .	Complied.
Conshohocken Cottonade Mills, . . . . .	..	80	85	20	Good,	18.	Fire escape ordered.	
H. C. Jones & Co., . . . . .	Cotton and woolen goods, . . . . .	45	45	18	..	18.		

## STATISTICS OF FACTORIES—READING.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured.	NUMBER EMPLOYED.				Sanitary condition.	Date of inspection.	Orders given.	Compliance.	
		Males.		Females.	Under 12.					12 to 16.
Reading Hat Works, . . . . .	Hats, . . . . .	28	20	24	Fair,	Sept. 2,	Comply with sections 2, 10, 12, 18, . . . . .	Complied.		
D. F. Lotz & Co., . . . . .	" . . . . .	24	10	5	Good,	2,	Comply with sections 10 and 18, . . . . .	"		
George C. Heere, . . . . .	Cigars, . . . . .	20	20	2	"	2,	Post notices; discharge two children under 12, . . . . .	"		
W. A. Boas, . . . . .	Hosiery, . . . . .	4	46	10	"	2,	Comply with sections 2, 12, and 18, . . . . .	"		
Reading Cotton Mills, . . . . .	Cotton goods, . . . . .	50	250	75	"	2,				
Standard Cigar Factory, . . . . .	Cigars, . . . . .	2	38	15	"	3,	Post notices and keep record book, . . . . .	Complied.		
John R. Mast & Co., . . . . .	" . . . . .	9	11	3	"	3,	" . . . . .	"		
A. Tbalhelmer, . . . . .	Cigar boxes, . . . . .	25	20	7	"	3,	Post notices and keep record book and box in two belts and put gates on hoist doors, . . . . .	"		
Reading Knitting Mills, . . . . .	Hosiery, . . . . .	25	150	42	"	3,	Box in pulley shafting, . . . . .	"		
Excelsior Laundry, . . . . .	Laundry, . . . . .	6	18	"	"	3,	Post notices in each room, . . . . .	"		
Oriental Cigar Factory, . . . . .	Cigars, . . . . .	40	45	17	"	3,	Gates to elevator; box in one belt on 1st floor, . . . . .			
Reading Box Factory, . . . . .	Cigar boxes, . . . . .	18	12	"	"	3,	Place gates to each floor opening of elevator, . . . . .			
Dibert Bros., . . . . .	Cigars, . . . . .	60	40	9	"	3,	Post notices and keep record book, . . . . .	Complied.		
W. H. Reimoehl & Co., . . . . .	Woolen hats, . . . . .	55	20	7	"	4,	Place two bars across hoist-doors and rail in connecting rod, . . . . .	"		
Nolde & Co., . . . . .	Hosiery, . . . . .	8	135	2	"	4,	Dismiss two children under 12, . . . . .	"		
Industrial Cigar Factory, . . . . .	Cigars, . . . . .	75	137	2	"	4,				
Keystone Box Factory, . . . . .	Cigar boxes, . . . . .	9	13	8	"	4,				
J. G. Mohn & Bros., . . . . .	Hats, . . . . .	63	22	1	"	5,	Dismiss one child under 12, . . . . .	Complied.		
R. H. Savage & Co., . . . . .	" . . . . .	120	30	8	"	5,				



Pennsylvania Hardware Company.	400	100	..	50	..	5.	
Reading Hardware Company, . . .	710	40	..	168	..	5.	
Henry B. Hendell & Co., . . . . .	65	35	..	5	..	5.	
John R. Miller & Co., . . . . .	60	40	..	6	Fair,	5.	Comply with sections 1, 2 and 3; box in two belts and cleanse water closets.
Kirshland & Samuel. . . . .	8	10	..	..	Good.	5.	Post notices: keep record book and designate water closets.
Globe Cigar Factory. . . . .	4	16	2	5	..	2.	Post and keep register of names and dismiss two children under 12.
Fisher & Poorman . . . . .	2	23	..	2	..	6.	Post notices and keep record book, . . . . .
Le Cubana Cigar Factory, . . . . .	100	75	..	7	Fair,	3.	Place urinal brackets in water closet with cleansing apparatus and box two belts.
Kline & Eppelheimer, . . . . .	40	30	..	10	Good,	9.	Post and keep register of names. . . . .
C. K. Whitner & Son. . . . .	14	15	..	2	Bad,	9.	Water closets for females. . . . .
Dives, Pomeroy & Stewart. . . . .	75	50	..	15	Good,	9.	
J. Mould & Co., . . . . .	15	10	..	3	..	10.	Post and keep register of names and comply with section 18.
Curtis Jones & Co., . . . . .	50	20	..	10	..	10.	
J. S. Shade, . . . . .	12	7	..	3	..	10.	
James S. Brunter. . . . .	2	23	..	..	..	10.	
C. L. Van Reed, . . . . .	2	10	..	..	..	10.	Gates to elevator, . . . . .
Geo. C. Frame, . . . . .	40	35	..	9	..	11.	Gates to elevator and fire escape ordered.
Rick Bros., . . . . .	120	..	..	37	..	11.	
G. W. Alexander & Co., . . . . .	58	32	..	16	..	11.	
T. A. Wilson, . . . . .	60	100	..	10	..	11.	
Pennsylvania Shoe Company, . . .	10	13	..	1	..	11.	Post and keep register of names.
J. G. Leimbach & Co., . . . . .	35	24	..	13	..	11.	Box in belt on second floor of warehouse. . . .
Hendel Bros', Sons & Co., . . . . .	95	45	..	15	..	12.	
F. C. Wertz, . . . . .	33	..	..	17	..	12.	
Reading Silk Mills, . . . . .	35	225	..	82	..	12.	
Chas. W. Hendell, . . . . .	21	14	..	5	..	12.	Post and keep register of names and box in wheel on first floor.

STATISTICS OF FACTORIES—MANAYUNK, PHILADELPHIA.  
Mrs. BELLE McENERY, Deputy for District No. 1.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured	NUMBER EMPLOYED.				Sanitary condition.	Date of inspection.	Orders given.	Compliance.
		Males.	Females.	Under 12.	12 to 16.				
Stafford & Co., . . . . .	Carpets and yarns, . . . . .	32	8	. .	. .	Good.	Feb. 28.		
Standard Mills. . . . .	Flushes, . . . . .	27	48	. .	. .	"	27.		
Arkwright Mills . . . . .	Cotton goods, . . . . .	55	25	. .	. .	"	27.		
Wm. Hall & Sons, . . . . .	Cloth, . . . . .	190	160	. .	100	"	27.	Gates to elevator, . . . . .	Complied.

ROXBOROUGH, PHILADELPHIA.

E. H. Morris, . . . . .	Woolen yarns, . . . . .	30	10	. .	2	Good.	Sept. 17.		
Geo. L. James, . . . . .	Woolen goods, . . . . .	11	5	. .	6	"	18.		
J. Leech & Bro., . . . . .	Woolen mill, . . . . .	55	365	. .	9	"	Oct. 8.		

TACONY, PHILADELPHIA.

Henry Diston & Sons, . . . . .	Steel, . . . . .	1,640	60	3	143	Good.	Sept. 19.	Dismiss three children under 12, . . . . .	Complied.
Erben, Search & Co., . . . . .	Woolen mill, . . . . .	80	70	. .	43	"	19.		

NORTH WALES, MONTGOMERY COUNTY.

Montgomery Web Company, . . . . .	Webbing, . . . . .	45	32	1	Good,	July 22.	
Philadelphia Cloak and Suit Co., . . . . .	Cloaks and suits, . . . . .	100	250	..	..	22.	

PHILADELPHIA.

Robert Wilde & Sons, . . . . .	Yarns, . . . . .	36	14	..	Good.	Feb 27.	
Star Woolen Mills, . . . . .	" . . . . .	60	23	..	..	28.	
Falcon Hosiery Mill, . . . . .	Hosiery, . . . . .	20	60	8	..	28.	
Barnes' Laundry, . . . . .	Laundry, . . . . .	7	38	1	..	Mar. 3.	
Langfield Bros. & Co., . . . . .	Leather goods, . . . . .	200	100	7	..	3.	
Louis Eschner & Bro., . . . . .	Men's neckwear, . . . . .	45	130	..	..	3.	
Troy Laundry, . . . . .	Laundry, . . . . .	13	38	..	..	3.	Railings ordered. . . . .
Huylers, . . . . .	Candy, . . . . .	3	11	..	..	4.	Completed.
D. & J. Noblit, . . . . .	Dry goods, . . . . .	25	10	..	..	4.	
Richard J Lennon, . . . . .	Ladies and children's clothing	20	80	..	..	5.	
John Mustlin, . . . . .	Notions, . . . . .	12	15	3	..	5.	
Singer Manufacturing Company, . . . . .	Sewing machines, . . . . .	50	10	..	..	5.	
Eshleman & Craig, . . . . .	Shirts, . . . . .	7	53	7	..	6.	Door to elevator, . . . . .
B. F. Dewees, . . . . .	Dry goods, . . . . .	30	50	3	..	6.	Completed.
Darlington & Runk, . . . . .	" . . . . .	100	300	28	..	7.	
J. Rothschild & Co., . . . . .	Millinery, . . . . .	5	30	4	..	7.	
T. Lalor & Co., . . . . .	Dry goods, . . . . .	30	10	10	..	10.	
J. B. Sheppard & Sons, . . . . .	" . . . . .	50	50	10	..	10.	
Keystone Watch Case Company, . . . . .	Watch cases, . . . . .	775	325	..	..	10.	
Bachelor Bros., . . . . .	Tobacco, . . . . .	92	30	5	..	11.	
B. English & Sons, . . . . .	Furs, . . . . .	75	75	..	..	11.	
Sloan & McCallum, . . . . .	Carpets, . . . . .	35	25	..	..	11.	

## STATISTICS OF FACTORIES—PHILADELPHIA—Continued.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured.	NUMBER EMPLOYED.				Sanitary condition.	Date of inspection.	Orders given.	Compliance.
		Males.	Females.	Under 12.	12 to 16.				
G. A. Swartz, . . . . .	Toys, . . . . .	12	12	..	3	Good.	Mar. 12.		
Schmoele & Co., . . . . .	Millinery, . . . . .	..	50	..	2	"	12.		
Jacob Reed & Sons, . . . . .	Tailors and clothiers, . . . . .	185	15	..	19	"	12.		
H. Varwig & Bro., . . . . .	Plush cases and novelties, . . . . .	17	18	..	18	"	13.		
Caldwell & Co., . . . . .	Jewelry, . . . . .	120	..	..	15	"	13.		
John F. Orne, . . . . .	Carpets, . . . . .	60	10	..	..	"	13.		
Baylock & Blynn, . . . . .	Hats and furs, . . . . .	12	9	..	..	"	14.		
Blum Bros., . . . . .	Cloaks, . . . . .	100	50	..	..	"	14.		
D. Morse, . . . . .	Baking, . . . . .	10	15	..	..	"	14.		
Ivins, Dietz & Magee, . . . . .	Carpets, . . . . .	20	289	..	14	"	17.		
Snellenburg & Co., . . . . .	Clothiers, . . . . .	85	15	..	12	"	17.		
Godfrey Keebler & Co., . . . . .	Crackers, . . . . .	70	90	..	10	"	18.		
Homer & Le Boutillier, . . . . .	Dry goods, . . . . .	25	75	..	24	"	18.		
R. J. Allen, Son & Co., . . . . .	China and glass, . . . . .	65	15	..	20	"	19.	Post notices, . . . . .	Complied.
Wm. Huey, . . . . .	Lace goods, . . . . .	5	45	..	6	"	19.		
Otto Eisenlohr, . . . . .	Cigars, . . . . .	25	..	..	13	"	20.		
Eagle Shirt Factory, . . . . .	Shirts, . . . . .	30	135	..	4	"	20.		
Strawbridge & Clothier, . . . . .	Dry goods, . . . . .	1,200	800	..	500	"	21.		
Partridge & Richardson, . . . . .	Trimmings, . . . . .	100	250	..	50	"	21.		
Alfred Williams, . . . . .	Gloves, . . . . .	3	27	..	1	"	24.		



G. B. Haines & Co., . . . . .	Dry goods. . . . .	125	275	50	..	24.
Strunk & Vansant, . . . . .	Flowers and feathers, . . . .	2	18	6	..	24.
J. W. Hallahan. . . . .	Shoes, . . . . .	6	17	4	..	25.
Gersons, . . . . .	Millinery, . . . . .	25	100	2	..	25.
S. H. Belcher. . . . .	Dry goods. . . . .	20	80	25	..	25.
Custers, . . . . .	Millinery. . . . .	10	140	10	..	26.
Mammoth Five-cent Store, . . . .	Notions, . . . . .	25	125	3	..	26.
Daniels Brothers, . . . . .	Millinery, . . . . .	5	30	1	..	26.
Lemalstre, . . . . .	Notions, . . . . .	2	10	3	..	27.
Julius Sichel, . . . . .	Trimnings, . . . . .	40	150	15	..	27.
Cook & Bro., . . . . .	Hosiery and underwear. . . .	25	50	25	..	27.
Marks Bros., . . . . .	Millinery, silk and laces, . .	90	275	33	..	28.
Shoneman Eros, . . . . .	Fancy goods, . . . . .	16	100	30	..	28.
J. & L. Baxter, . . . . .	Flowers and feathers, . . . .	15	125	30	..	28.
Adolph Heller. . . . .	Millinery, . . . . .	40	260	12	..	31.
H. Heller, . . . . .	White goods, . . . . .	20	100	10	..	31.
S. S. Custer. Son & Co., . . . . .	Millinery, . . . . .	22	18	..	..	31.
American Novelty Straw Hats, . . .	Straw hats, . . . . .	10	10	..	..	31.
Hensel, Colladay & Co., . . . . .	Dress trimmings, . . . . .	100	400	25	..	April 1.
Eavenson & Sons, . . . . .	Soaps, . . . . .	30	12	6	..	1.
J. W. Calver. . . . .	Hat frames, . . . . .	8	27	..	..	1.
Sharpless Bros., . . . . .	Dry goods, . . . . .	150	250	50	..	2.
J. B. Lippincott & Co., . . . . .	Publishers, . . . . .	300	100	25	..	2.
Jno. Wanamaker, . . . . .	Dry goods, . . . . .	1,700	2,300	300	..	3.
Wm. Marley & Co., . . . . .	Book bindery, . . . . .	15	20	4	..	3.
Wm. Rutter & Co., . . . . .	Book binders, . . . . .	35	40	1	..	3.
Sherman & Co., . . . . .	Book printers, . . . . .	12	19	..	..	3.
Weiss, Frank & Co., . . . . .	Children's wear. . . . .	40	50	25	..	3.
National Publishing Company, . . . .	Book bindings, . . . . .	150	150	15	..	8.

Gate to elevator, . . . . . Complied.

Erect two fire escapes, . . . . . Complied.

## STATISTICS OF FACTORIES—PHILADELPHIA—Continued.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured.	NUMBER EMPLOYED.			Sanitary condition.	Date of inspection.	Orders given.	Compliance.
		Males.	Females.	Under 12. 12 to 16.				
J. C. Myers, . . . . .	Shirts and cloaks, . . . . .	3	12	1	Good,	April 8.		
Wm. A. Haines, . . . . .	Leather goods, . . . . .	15	35	5	"	8.		
Selig & Kaufman, . . . . .	Buttons, . . . . .	20	55	9	"	8.		
Harris & Henderson, . . . . .	Shoes, . . . . .	130	45	10	"	9.		
Webb & Lepore, . . . . .	" . . . . .	35	15	"	"	9.		
A. Reed & Co., . . . . .	Book binders, . . . . .	50	50	2	"	9.		
Heidelberger, Frank & Co., . . . . .	Art embroidery goods, . . . . .	25	75	10	"	9.		
John B. Moorely, . . . . .	Clothing, . . . . .	37	38	"	Bad, .	10.	Comply with section 10, . . . . .	Complied.
Porter & Coates, . . . . .	Books, . . . . .	40	"	10	Good,	10.		
Mrs. A. J. Parker, . . . . .	Straw works, . . . . .	15	50	5	"	10.		
J. W. Mendli, . . . . .	Coats and caps, . . . . .	10	50	5	"	10.		
Henry Hobert, . . . . .	Coats, . . . . .	3	12	"	"	11.		
S. Simon & Co., . . . . .	Cloaks, . . . . .	100	50	"	"	11.		
Belknap, Johnson & Power, . . . . .	Parasols and umbrellas, . . . . .	100	150	"	"	11.		
Wright, Myers & Co., . . . . .	Cards, . . . . .	50	20	6	"	14.	One automatic door ordered, . . . . .	Complied.
Boltz, Clymer & Co., . . . . .	Cigars, . . . . .	300	100	"	Bad, .	14.	Two gates to elevator; comply with section 10,	Complied.
Chas. W. Mecke & Co., . . . . .	" . . . . .	100	50	3	Good,	14.	Gate to elevator, . . . . .	"
H. P. Heppie, . . . . .	Paper boxes, . . . . .	4	16	1	"	15.	Belt to box, . . . . .	"
T. E. Baxter & Co., . . . . .	Shirts, . . . . .	10	30	5	"	15.		
Wm. B. Grinn, . . . . .	Paper boxes, . . . . .	25	15	6	"	15.		

Elliott & Mallery, . . . . .	Cards, . . . . .	10	15	5	15.				
Wanamaker & Brown, . . . . .	Clothing, . . . . .	375	25	15	16.				
E. Heid, . . . . .	Hats and caps, . . . . .	30	30	..	16.	Belt to box	Completed.		
D. W. J. Hutton & Son, . . . . .	Overalls and shirts, . . . . .	5	25	..	16.				
Edward D. Doeker, . . . . .	Paper bags, . . . . .	39	50	6	16.				
Righter & Gibson, . . . . .	Book bindery, . . . . .	13	22	..	17.	Belt to box; water closets to be disinfected.	Completed.		
Henry B. Ashmead, . . . . .	Book printing, . . . . .	33	12	2	17.	Belt to box, . . . . .	..		
S. M. Wanamaker & Co., . . . . .	Clothing, . . . . .	210	40	..	17				
Winelander & Co., . . . . .	Umbrellas and parasols, . . . . .	2	10	6	19.				
Bowker & Swain, . . . . .	Shirts, . . . . .	13	12	..	21.				
Ben F. McCutcheon, . . . . .	Laundry, . . . . .	1	12	..	21.	Belt to box, . . . . .	Completed.		
Keystone Publishing Company, . . . . .	Book making, . . . . .	28	14	..	21.				
Jonathan Knight, . . . . .	Shirts, . . . . .	2	28	..	22.				
Hallowell & West, . . . . .	Book bindery, . . . . .	8	12	1	22.	Disinfect water closets, . . . . .	Completed.		
Daniels Shirt Company, . . . . .	Shirts, . . . . .	2	78	..	22.				
Continental Manufacturing Co., . . . . .	Mucilage, . . . . .	3	12	7	23	Bar to elevator, . . . . .	Completed.		
G. A. Bisler, . . . . .	Boxes, . . . . .	25	100	15	23.				
M. P. Phillpot & Co., . . . . .	" . . . . .	15	85	18	23.				
H. Josephson, . . . . .	Neckwear, . . . . .	2	28	..	24.				
Neptune Laundry, . . . . .	Laundry, . . . . .	2	18	..	24.	Belts to box; door to elevator, . . . . .	Completed.		
Powers & Weightman, . . . . .	Chemicals, . . . . .	360	140	..	24.				
Antonlo, Rolg, Lansdorf & Co., . . . . .	Cigars, . . . . .	180	20	..	25.				
Brown & Bailey, . . . . .	Paper boxes, . . . . .	30	50	..	25.				
Clarence M. Busch, . . . . .	Printing, . . . . .	5	35	..	28.	Wheel to box, . . . . .	Completed.		
M. W. Lipper & Co., . . . . .	Dress trimmings, . . . . .	100	400	28	28.				
Oldach & Co., . . . . .	Book bindery, . . . . .	60	40	..	29.	Water closets to be cleansed: repair latches to elevators.	Completed.		
Shaw & Ewing, . . . . .	Straw works, . . . . .	5	40	..	29.	Box wheel; water closets ordered, . . . . .	..		
Dunlap & Clarke, . . . . .	Printers, . . . . .	80	20	..	30.				

## STATISTICS OF FACTORIES—PHILADELPHIA—Continued.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured.	NUMBER EMPLOYED.			Sanitary condition.	Date of inspection.	Orders given.	Compliance.
		Males.	Females.	Under 12. 12 to 16.				
Henry Zäuner, . . . . .	Children's caps, . . . . .	75	...	...	Poor,	April 30,		
Perfection Playing Cards, . . . . .	Cards, . . . . .	10	30	...	Good,	30.		
Pennsylvania Cloak Company, . . . . .	Cloaks, . . . . .	...	20	...	..	May 1.		
Belmont Knitting Mills, . . . . .	Jerseys, . . . . .	20	...	...	..	1.		
J. W. Warford & Co., . . . . .	Shirts, . . . . .	20	...	...	..	1.		
Lyon & Loeb, . . . . .	Paper boxes, . . . . .	12	68	7	..	2.		
A. Gentzsch & Sons, . . . . .	" . . . . .	25	50	5	..	2.		
National Shirt Factory, . . . . .	Shirts, . . . . .	10	40	...	..	2.		
Ladies' Home Journal, . . . . .	Books, . . . . .	50	150	2	..	2.		
Kaufman Bros. & Co., . . . . .	Trimnings, . . . . .	100	300	...	..	5.		
J. T. Palmer, . . . . .	Book printing, . . . . .	2	23	1	..	5.		
Kreeger & Connelly, . . . . .	Paper boxes, . . . . .	7	25	...	..	6.		
Geo. W. Plumly, . . . . .	" . . . . .	50	300	25	..	6.		
Columbia Manufacturing Company.	Dress trimmings, . . . . .	75	350	...	..	7.		
De Young & Hoffman, . . . . .	Neckwear, . . . . .	5	35	...	..	7.		
Lewis Oppenheimer & Sons, . . . . .	Suspenders, . . . . .	5	30	1	..	8.		
C. C. Hancock & Co., . . . . .	Neckwear, . . . . .	15	150	1	..	8.		
F. D. Weylander & Co., . . . . .	Shoes, . . . . .	20	20	...	..	8.		
Abe Hirsch & Bros., . . . . .	Parasols, . . . . .	30	60	...	..	8.		
Wright Bros. & Co., . . . . .	Umbrellas, . . . . .	100	200	...	..	9.		
							Communication with engineer's room. . . . .	Complied.



Chambers & Co.,	Parasols,	7	20	2	9.	9.	9.
Walter M. Steppacher,	Emery B. shirts,	25	100	4	9.	9.	9.
M. S. Myerhoff & Co.,	Novelties,	8	27	1	12.	12.	12.
James Cotter,	Shoes,	8	27	1	Fair.	Guard belt; disinfect water closets,	Complied.
Sol. Miller & Co.,	Globe shirts,	2	73	..	12.	Water closets to be disinfected.	..
Lewin & Kimelsman,	Shirts,	10	30	1	Good.	13.	13.
Steenberger & Co.,	Pearl shirts,	..	500	6	13.	13.	13.
Young & Kelm,	Paper boxes,	2	28	1	14.	14.	14.
Freeman & Rice,	Shirts,	6	20	1	14.	14.	14.
Friesmuth Bros. & Co.,	Smoking tobacco,	140	60	15	14.	14.	14.
F. Shoettle,	Paper boxes,	135	115	15	15.	15.	15.
Bloch & Schwerin,	Children's carriages,	40	10	5	15.	15.	15.
Arthur Fricks,	Perfumery,	15	12	..	15.	15.	15.
A. Wilber & Sons,	Chocolate,	55	20	..	19.	19.	19.
M. S. Hager,	Shoes,	27	13	7	19.	19.	19.
Peensylvania Button Works,	Buttons,	15	20	12	20.	20.	20.
Partridge & Richardson,	Trimnings,	63	12	8	20.	20.	20.
E. Thallg,	Paper boxes,	6	25	8	20.	20.	20.
Pennsylvania Buttonhole Manufacturing Company,	Buttonholes,	25	75	6	21.	21.	21.
J. M. Hansell & Co.,	Envelopes,	22	16	10	21.	21.	21.
A. Schmidt,	Paper boxes,	2	28	3	21.	21.	21.
Kreeker & Co.,	..	3	32	..	23.	23.	23.
Croxtan. Wood & Co.,	Shoes,	66	40	..	23.	23.	23.
Hirsh & Bro.,	Parasols and umbrellas,	200	400	25	25.	25.	25.
Gumpert Bros.,	Cigars,	150	100	20	26.	26.	26.
A. C. Yates & Co.,	Clothing,	70	5	15	27.	27.	27.
Simons Bros. & Co.,	Jewelry,	225	125	25	27.	27.	27.
Dr. D. Jayne & Son,	Laboratory,	60	40	..	29.	29.	29.

## STATISTICS OF FACTORIES—PHILADELPHIA—Continued.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured.	NUMBER EMPLOYED.			Sanitary condition.	Date of inspection.	Orders given.	Compliance.
		Males.	Females.	Under 12.	12 to 16.			
Stephen Green, . . . . .	Blank books, . . . . .	105	15	..	5	May 29.		
Pulaski & Co., . . . . .	Embroideries, . . . . .	15	15	..	..	June 2.		
Wm. T. Murphy's Sons, . . . . .	Blank books, . . . . .	96	7	..	18	2.		
Thos. W. Price, . . . . .	Envelopes, . . . . .	45	15	..	6	2.		
Edward Roggsweiler, . . . . .	Swiss embroideries, . . . . .	7	13	..	..	4.		
Wm. M. Christy, Sons & Co., . . . . .	Blank books, . . . . .	20	5	..	5	4.		
John Graff, . . . . .	Embroideries, . . . . .	4	13	..	..	4.	Disinfect water closets, . . . . .	Complied.
Peterlein Bros., . . . . .	Cigars, . . . . .	85	15	..	..	June 5.		
State House Cigar Manuf'g Co., . . . . .	" . . . . .	45	15	..	2	6.		
Millward Cliff Cracker Company, . . . . .	Crackers, . . . . .	87	8	..	3	9.		
Edwin J. Howlett & Son, . . . . .	Paper bags, . . . . .	21	15	..	3	9.		
Wm. B. Warner, . . . . .	Chemists, . . . . .	8	12	..	..	9.		
Thos. J. Jeffries, . . . . .	Paper boxes, . . . . .	2	28	..	..	10.		
Tiehner & Frank, . . . . .	Jerseys, . . . . .	40	160	..	2	10.		
David Stern, . . . . .	Children's cloaks, . . . . .	125	175	..	2	12.		
H. Muhr's Sons, . . . . .	Jewelers, . . . . .	299	26	..	26	12.		
Roseneau Bros., . . . . .	Straw works, . . . . .	20	40	..	..	12.		
MacKellar, Smiths & Jordan Co., . . . . .	Type foundry, . . . . .	300	..	..	75	13.		
Eastman & Bro., . . . . .	Perfumes, . . . . .	23	27	..	6	13.		
Wilson Biscuit Company, . . . . .	Crackers, . . . . .	120	80	..	20	16.	Guard elevators and improve water closets, . . . . .	Complied.

	20	15	Good.	16.	
H. M. Oliver, . . . . .	20	15	..	16.	
Walter S. Berg, . . . . .	2	28	..	16.	
Western Union Telegraph Co., . . . . .	632	50	632	16.	
Henry Schmidt & Bro., . . . . .	15	45	2	17.	
J. Roggenberger & Sons, . . . . .	6	50	Bad.	17.	Complied.
Allen & Martin, . . . . .	35	30	..	17.	..
Sheip & Vandergrift, . . . . .	59	26	6 Good.	19.	
Hagedorn & Mertz, . . . . .	200	300	66	19.	
N. B. Cox & Co., . . . . .	55	20	Bad.	20.	Complied.
J. H. Schneek, . . . . .	9	10	Good.	20.	
Huguenie & Rechler, . . . . .	5	20	..	20.	
Jacob Datz, . . . . .	5	145	20	23.	
C. W. Hill, . . . . .	55	20	..	23.	
Ketterlinus & Co., . . . . .	122	28	5	24.	
Taylor & Care, . . . . .	45	15	3	24.	
Frederick Jones & Co., . . . . .	15	20	10	25.	Complied.
Lewis Weinberger, . . . . .	4	15	..	25.	
S. S. Fretz, . . . . .	100	150	20	26.	
H. Bernstein, . . . . .	5	16	10	26.	
Wm. Mann, . . . . .	150	25	15	27.	
F. Hassler, . . . . .	5	15	1	27.	
M. A. Shoneman, . . . . .	14	16	..	30.	
Wm. Mann & Co., . . . . .	16	21	2	30.	
David Hemley's Sons, . . . . .	15	165	38	July 1.	
H. Riley, . . . . .	5	30	..	1.	
Louis S. Bailey, . . . . .	30	20	..	2.	
Boyer, Evans & Co., . . . . .	12	20	1	2.	
Philip Hauck, . . . . .	35	90	6	3.	
Philadelphia Local Telegraph Co., . . . . .	15	16	3	3	
Shoes, . . . . .					
Parasols and lamp shades, . . . . .					
Telegrams, . . . . .					
Paper boxes, . . . . .					
Shoes, . . . . .					
Cigar boxes, . . . . .					
Royal Shirt Company, . . . . .					
Shoes, . . . . .					
Laboratory, . . . . .					
Gents' furnishing goods, . . . . .					
Corsets, . . . . .					
Shoes, . . . . .					
Printing, . . . . .					
Shoes, . . . . .					
Blank books, . . . . .					
Lace caps, . . . . .					
Parasols, . . . . .					
Dress trimmings, . . . . .					
Blank books, . . . . .					
Parasols, . . . . .					
Umbrellas, . . . . .					
Blank books, . . . . .					
Artificial flowers, . . . . .					
Shirts, . . . . .					
Cloaks, . . . . .					
Bags, . . . . .					
Paper boxes, . . . . .					
Stock Exchange and Tel., . . . . .					

## STATISTICS OF FACTORIES—PHILADELPHIA—Continued.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured.	NUMBER EMPLOYED.			Sanitary condition.	Date of inspection.	Orders given.	Compliance.
		Males.	Females.	Under 12. 12 to 16.				
Jacob Langsdorf Sons. . . . .	Cigars, . . . . .	70	10	..	2	July, 3.		
Joseph Adamson & Co., . . . . .	Brads, . . . . .	25	150	..	27	7.		
Thos. A. Pearce, . . . . .	Hosiery, . . . . .	100	300	..	50	9.		
Phillip Doerr & Sons, . . . . .	Trimnings, . . . . .	25	130	..	12	9.	Improve water closets; door to elevator, . . . .	Complied.
J. J. McConnell, & Co., . . . . .	Cotton yarns, . . . . .	30	15	..	7	10.		
E. R. Britley, . . . . .	Carpets, . . . . .	35	15	..	..	10.		
J. C. Graham, . . . . .	Trimnings, . . . . .	85	85	..	29	10.		
Laird, Schober & Mitchell, . . . . .	Shoes, . . . . .	325	175	..	38	11.		
Oehle Bros. & Co., . . . . .	Trimnings, . . . . .	20	60	..	4	11.		
W. H. Delsroth, . . . . .	Paper boxes, . . . . .	1	29	..	4	11.		
I. Birge, . . . . .	Artificial flowers, . . . . .	10	115	..	56	15.		
Jno. Martel & Co., . . . . .	.. . . .	1	29	..	12	15.		
Howell, Stein & Co., . . . . .	Neckwear, . . . . .	5	45	..	..	15.		
C. & G. Sasman, . . . . .	Hosiery, . . . . .	10	110	..	13	16.		
W. F. Shaw, . . . . .	Book bindery, . . . . .	28	12	..	..	16.		
M. Mendelsohn, . . . . .	Paper boxes, . . . . .	5	20	..	..	16.		
S. F. Whitman & Son, . . . . .	Chocolate, . . . . .	50	50	..	..	16.		
Putzel, Rothschild & Co., . . . . .	Gents neckwear, . . . . .	5	15	..	..	17.		
Jno. Steffer, . . . . .	Shoes, . . . . .	13	12	..	2	17.		
Thos. Carrick & Co., . . . . .	Crackers, . . . . .	56	..	..	12	17.		



	8	72	17.	Completed.
F. M. Walton.	Neckwear.	60	17.	Completed.
Oldach & Co..	Book binding.	100	17.	Completed.
Belknap, Johnson & Power.	Parasols.	20	21	Guard door and disinfect water closets.
A. D. Irwin & Bro..	Cotton and woolen yarns.	7	23.	Completed.
Barnes Laundry Company.	Laundry.	200	23.	Completed.
Langfeld Bros & Co .	Leather goods.	45	24.	Completed.
Louis Eshner & Bro .	Neckwear.	1 700	24	Completed.
Jno. Wanamaker.	Dry goods.	13	24.	Completed.
Troy Laundry.	Laundry.	3	24.	Completed.
Huyler's.	Candy.	50	25.	Completed.
Singer Manufacturing Company.	Sewing machines.	6	25.	Completed.
Jno. Mustin.	Notions.	26	25.	Completed.
Richard J. Lennon.	Clothing	33	28.	Completed.
Mosebach.	Baking and confectionery	30	29.	Completed.
B. Z. Dewees.	Dry goods.	7	29	Completed.
Esbleman, Cralg & Co	Shirts.	100	30.	Completed.
Darlington & Runk.	Dry goods.	16	31.	Completed.
Shoneman Bros..	Fancy goods.	50	31.	Completed.
J B. Sheppard & Sons.	Dry goods.	5	31.	Completed.
J. Rothschild & Co .	Millinery.	10	31	Completed.
T. Lalor & Co .	Dry Goods.	774	31	Completed.
Keystone Watch Case Company.	Watch cases.	92	Aug 1.	Completed.
Bachelor Bro .	Cigars.	75	1	Completed.
English & Sons.	Furs.	35	1.	Completed.
McCallum & Sloan.	Carpets.	70	4.	Completed.
E. A. Wright.	Engraving and printing	159	4.	Completed.
Allen, Lane & Scott.	Printing.	12	4.	Completed.
Quaker City Laundry.	Laundry.	17	5	Completed.
H. Varwig & Bro .	Fancy goods.	18	5	Completed.

## STATISTICS OF FACTORIES—PHILADELPHIA—Continued.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured.	NUMBER EMPLOYED.			Sanitary condition	Date of inspection		Orders given.	Compliance
		Males	Females	Under 12	12 to 16				
Jacob Reed's Sons. . . . .	Tailors, . . . . .	185	15	6	17	Aug	5	Dismiss six children under 12. . . . .	Complied
Schmoele & Co. . . . .	Millinery, . . . . .	50	50	3	3	5	5		
G. A. Swartz. . . . .	Toys, . . . . .	12	12	3	3	5	5		
W. E. & E. D. Lockwood. . . . .	Folding paper boxes . . . . .	25	75	1	5	5	5	Dismiss one child under 12. . . . .	Complied
Caldwell & Co. . . . .	Jewelry, . . . . .	120	2	15	15	6	6	Dismiss two children under 12. . . . .	..
Jno. F. Orne, . . . . .	Carpets, . . . . .	60	10	..	..	6	6		
Banard Levy, . . . . .	Watch cases, . . . . .	31	4	6	6	6	6		
Blaylock & Blynn, . . . . .	Hats and furs, . . . . .	12	9	4	4	6	6		
Blum Bros. . . . .	Cloaks, . . . . .	100	50	..	..	7	7		
D. Morse, . . . . .	Baking, . . . . .	10	15	..	..	7	7		
Ivins, Deltz & Magee, . . . . .	Carpets, . . . . .	20	289	5	14	7	7	Dismiss five children under 12. . . . .	Complied.
Snellenberg & Co. . . . .	Clothiers, . . . . .	85	15	2	12	7	7	Dismiss two children under 12. . . . .	..
Economy Shirt Works, . . . . .	Shirts, . . . . .	15	65	1	1	8	8	Improve water closets.	
Hastings & Co. . . . .	Gold leaf, . . . . .	100	75	3	3	8	8	Dismiss three children under 12. . . . .	Complied.
Keebler & Weyl, . . . . .	Bakery, . . . . .	12	68	2	13	8	8	Dismiss two children under 12. . . . .	..
Homer & Le Boutiller, . . . . .	Dry goods, . . . . .	25	75	3	25	8	8	Dismiss three children under 12. . . . .	..
R. J. Allen, . . . . .	China and glass . . . . .	65	15	20	20	8	8		
R. Henry, . . . . .	Yarns, . . . . .	16	..	18	18	11	11		
William Holmes & Son, . . . . .	" . . . . .	17	6	2	17	11	11	Dismiss two children under 12: put water closets in good condition.	Complied.

		330	220	1	16	Good.	Aug	11.		Complied.
Porter & Dickey, . . . . .	Carpets, . . . . .	50	275	3	30	.	11,	Dismiss one child under 12. . . . .	Dismiss three children under 12. . . . .	Complied.
John Gay's Sons, . . . . .	.. . . .	13	..	..	7	.	12.	Dismiss three children under 12. . . . .	Dismiss three children under 12. . . . .	Complied.
H. B. Thomas, . . . . .	Yarns, . . . . .	23	17	..	12	Poor,	12	Dismiss three children under 12. . . . .	Dismiss three children under 12. . . . .	Complied.
J Dalton & Bros. . . . .	Yarns and cloths, . . . . .	5	45	1	6	Good.	12.	Dismiss one child under 12, . . . . .	Dismiss one child under 12, . . . . .	Complied.
William Huey, . . . . .	Lace goods, . . . . .	1,200	800	20	500	..	12.	Dismiss twenty children under 12 years of age, . . . . .	Dismiss twenty children under 12 years of age, . . . . .	Complied.
Strawbridge & Clothier, . . . . .	Dry goods, . . . . .	50	135	2	13	..	13.	Dismiss two children under 12 . . . . .	Dismiss two children under 12 . . . . .	Complied.
Eagle Shirt Factory, . . . . .	Shirts, . . . . .	10	10	..	3	..	13	Dismiss three children under 12. . . . .	Dismiss three children under 12. . . . .	Complied.
Novelty Straw Works, . . . . .	Straw hats, . . . . .	2	18	3	6	..	13,	Dismiss five children under 12. . . . .	Dismiss five children under 12. . . . .	Complied.
Strunk & Vanzant, . . . . .	Artificial flowers, . . . . .	100	250	5	50	..	13.	Dismiss five children under 12. . . . .	Dismiss five children under 12. . . . .	Complied.
Partridge & Richardson, . . . . .	Dry goods, . . . . .	125	275	5	50	.	13.	Dismiss five children under 12, . . . . .	Dismiss five children under 12, . . . . .	Complied.
Granville B. Haines, . . . . .	.. . . .	3	27	..	1	..	14.	Dismiss five children under 12. . . . .	Dismiss five children under 12. . . . .	Complied.
Alfred Williams, . . . . .	Gloves, . . . . .	20	80	5	25	..	14.	Dismiss one child under 12. . . . .	Dismiss one child under 12. . . . .	Complied.
T H. Belcher, . . . . .	Dry goods, . . . . .	125	..	1	5	..	14.	Dismiss three children under 12 . . . . .	Dismiss three children under 12 . . . . .	Complied.
Gersons, . . . . .	Millinery and dry goods, . . . . .	10	140	3	10	.	15.	Dismiss five children under 12. . . . .	Dismiss five children under 12. . . . .	Complied.
D. W. Custer, . . . . .	Millinery, . . . . .	5	17	..	4	..	15.	Dismiss five children under 12. . . . .	Dismiss five children under 12. . . . .	Complied.
J. W. Hallahan, . . . . .	Shoes, . . . . .	25	125	5	15	.	15.	Dismiss four children under 12. . . . .	Dismiss four children under 12. . . . .	Complied.
Mammoth Five Cent Store, . . . . .	Notions, . . . . .	22	318	..	5	.	18	Dismiss seven children under 12. . . . .	Dismiss seven children under 12. . . . .	Complied.
J. N. Custer's Sons & Co. . . . .	Millinery, . . . . .	55	285	4	30	..	18.	Dismiss two children under 12. . . . .	Dismiss two children under 12. . . . .	Complied.
J & L. Baxter, . . . . .	Artificial flowers and feathers . . . . .	45	320	7	38	..	18.	Dismiss one child under 12. . . . .	Dismiss one child under 12. . . . .	Complied.
Marks' Bros., . . . . .	Millinery and laces, . . . . .	125	50	2	25	..	18.	Dismiss three children under 12, . . . . .	Dismiss three children under 12, . . . . .	Complied.
Cook & Bro, . . . . .	Hosiery and underwear, . . . . .	34	8	..	5	..	19.	Dismiss three children under 12. . . . .	Dismiss three children under 12. . . . .	Complied.
Evanson & Sons, . . . . .	Soaps, . . . . .	8	27	..	..	..	19.	Dismiss two children under 12. . . . .	Dismiss two children under 12. . . . .	Complied.
J W Calver, . . . . .	Hat frames . . . . .	40	260	1	27	..	19.	Dismiss one child under 12, . . . . .	Dismiss one child under 12, . . . . .	Complied.
Adolph Heller, . . . . .	Millinery, . . . . .	20	300	1	20	..	19	Dismiss three children under 12, . . . . .	Dismiss three children under 12, . . . . .	Complied.
H. Heller, . . . . .	White goods, . . . . .	100	400	3	25	..	20.	Dismiss three children under 12. . . . .	Dismiss three children under 12. . . . .	Complied.
Hensel, Colladay & Co., . . . . .	Dress trimmings . . . . .	150	250	3	50	..	20.	Dismiss two children under 12. . . . .	Dismiss two children under 12. . . . .	Complied.
Sharpless Bros, . . . . .	Dry goods, . . . . .	350	100	2	25	.	20.	Dismiss two children under 12. . . . .	Dismiss two children under 12. . . . .	Complied.
J. B Lippincott & Co., . . . . .	Publishers, . . . . .	20	50	..	5	..	20.	Dismiss two children under 12. . . . .	Dismiss two children under 12. . . . .	Complied.
Weiss, Frank & Co. . . . .	Children s wear, . . . . .									

## STATISTICS OF FACTORIES—PHILADELPHIA—Continued.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured	NUMBER EMPLOYED.				Sanitary condition.	Date of inspection.	Orders given.	Compliance
		Males	Females	Under 12	12 to 16				
Sherman & Co . . . . .	Printing. . . . .	12	19	..	..	Good,	Aug 21.		
William Rutter. . . . .	Book binding. . . . .	35	40	..	1	..	21.		
William Marley & Co.. . . . .	.. . . .	15	20	..	4	..	21.		
Selig & Kaufman. . . . .	Buttons. . . . .	20	55	1	9	..	22.	Dismiss one child under 12. . . . .	Complied.
William A Haines. . . . .	Leather goods. . . . .	15	35	..	5	..	22		
J. C. Myers. . . . .	Cloaks. . . . .	3	12	..	2	..	22.		
National Publishing Co . . . . .	Books . . . . .	150	150	..	15	..	22.		
Harris & Henderson. . . . .	Shoes. . . . .	130	45	..	10	..	25.		
Webb & Lepout. . . . .	.. . . .	35	15	..	..	..	25.		
Heidelberger, Frank & Co., . . . . .	Art embroidery goods. . . . .	25	75	1	10	..	25.	Dismiss one child under 12 . . . . .	Complied.
A. Reed & Co., . . . . .	Book binding. . . . .	50	50	..	7	..	25.		
J. N. Mendil & Co., . . . . .	Coats and caps. . . . .	10	50	..	8	..	25.		
Mrs A. Parker. . . . .	Straw works. . . . .	15	50	..	5	..	25.		
Porter & Coates. . . . .	Books. . . . .	40	..	..	15	..	26.		
John B. Morley & Co . . . . .	Clothing. . . . .	37	38	..	..	..	26.		
T Simons & Co.. . . . .	Cloaks. . . . .	100	50	..	..	..	26.		
Henry Hobert. . . . .	Coats. . . . .	3	12	..	..	..	26.		
Charles W. Mecke. . . . .	Cigars. . . . .	100	50	1	10	..	26.	Dismiss one child under 12. . . . .	Complied
H. P. Heppel. . . . .	Paper boxes. . . . .	4	16	..	1	..	Sept. 8.		
T E. Baxter & Co.. . . . .	Shirts. . . . .	10	30	..	6	..	8.		



Wright, Ayers & Co., . . . . .	Cards, . . . . .	45	25	1	Good,	8.	8.
Wineland & Co., . . . . .	Umbrellas and parasols, . . . . .	4	8	4	..	8.	Dismiss two children under 12. . . . .
William B. Grim, . . . . .	Paper boxes, . . . . .	25	15	2	12	8.	Dismiss two children under 12. . . . .
E. Held, . . . . .	Hats, . . . . .	30	30	..	..	9.	Dismiss two children under 12. . . . .
Elliott & Mallery, . . . . .	Cards, . . . . .	10	15	..	5	9.	Dismiss two children under 12. . . . .
Wanamaker & Brown, . . . . .	Clothing, . . . . .	325	75	2	25	9.	Dismiss one child under 12. . . . .
H. Josephson, . . . . .	Neckwear, . . . . .	2	28	..	..	9.	Dismiss one child under 12. . . . .
D. W. J. Hutton & Son, . . . . .	Shirts, . . . . .	5	25	..	..	9.	Dismiss one child under 12. . . . .
Edward V. Docker, . . . . .	Paper boxes, . . . . .	30	50	1	14	10.	Dismiss one child under 12. . . . .
Righter & Gibson, . . . . .	Books, . . . . .	13	22	..	..	10.	Dismiss one child under 12. . . . .
Henry B. Ashmead, . . . . .	Book printing, . . . . .	33	12	..	2	10.	Dismiss one child under 12. . . . .
S. M. Wanamaker & Co., . . . . .	Clothing, . . . . .	210	40	1	10	10.	Dismiss one child under 12. . . . .
Rowlee & Swain, . . . . .	Shirts, . . . . .	13	12	..	..	10.	Dismiss one child under 12. . . . .
Benjamin McCutcheon, . . . . .	Laundry, . . . . .	1	12	..	2	11.	Dismiss one child under 12. . . . .
Keystone Publishing Co., . . . . .	Bookmaking, . . . . .	28	14	..	..	11.	Dismiss one child under 12. . . . .
Hallowell & West, . . . . .	Book bindery, . . . . .	8	12	..	1	11.	Dismiss one child under 12. . . . .
G. Daniels, . . . . .	Shirts, . . . . .	2	78	..	..	11.	Dismiss one child under 12. . . . .
Jonathan Knight, . . . . .	.. . . . .	2	28	..	..	11.	Dismiss one child under 12. . . . .
John A. Machen, . . . . .	Shoes, . . . . .	55	20	..	..	15.	Dismiss one child under 12. . . . .
Powers & Weightman, . . . . .	Chemicals, . . . . .	360	140	..	..	15.	Dismiss one child under 12. . . . .
Antonio Roig & Langsdorf, . . . . .	Cigars, . . . . .	180	20	..	15	15.	Dismiss one child under 12. . . . .
Brown & Bailey, . . . . .	Paper boxes, . . . . .	30	50	2	28	15.	Dismiss one child under 12. . . . .
M. W. Lipper & Co., . . . . .	Dress trimmings, . . . . .	100	400	3	32	15.	Dismiss one child under 12. . . . .
Clarence M. Busch, . . . . .	Printing, . . . . .	5	35	..	10	15.	Dismiss one child under 12. . . . .
Oldach & Co., . . . . .	Book bindery, . . . . .	60	40	..	5	16.	Dismiss one child under 12. . . . .
Shaw & Ewing, . . . . .	Straw works, . . . . .	5	40	..	..	16.	Dismiss one child under 12. . . . .
Perfection Playing Cards, . . . . .	Cards, . . . . .	10	30	..	10	16.	Dismiss one child under 12. . . . .
Dunlap & Clark, . . . . .	Printing, . . . . .	80	20	..	..	16.	Dismiss one child under 12. . . . .
J. W. Warford & Co., . . . . .	Shirts, . . . . .	..	20	..	..	17	Dismiss one child under 12. . . . .

## STATISTICS OF FACTORIES—PHILADELPHIA—Continued.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured.	NUMBER EMPLOYED.			Sanitary condition.	Date of inspection.	Orders given.	Compliance.
		Males.	Females.	Under 12. 12 to 16.				
Henry Zauner, . . . . .	Children's caps, . . . . .	1	74	. . .	Good.	Sept. 16.		
Belknap Knitting Mills, . . . . .	Jerseys, . . . . .	20	18	. . .	"	17.		
Pennsylvania Cloak Co., . . . . .	Cloaks, . . . . .	. . .	20	. . .	"	17.		
Ladies' Home Journal . . . . .	Books, . . . . .	50	150	12	"	17.		
National Shirt Factory, . . . . .	Shirts, . . . . .	10	40	. . .	"	17		
Robert O. Moorehouse, . . . . .	Book papers, . . . . .	55	40	. . .	Bad.	17.	Water closets in bad condition.	
A. Gentsch & Sons, . . . . .	Paper boxes, . . . . .	25	50	. . .	Good.	18.		
Lyon & Loeb, . . . . .	" . . . . .	12	68	12	"	18		
J. S. Palmer, . . . . .	Book printing, . . . . .	22	3	2	"	18.		
Kaufman Bros., . . . . .	Trimings, . . . . .	100	300	12	"	18.		
James Cotter, . . . . .	Shoes, . . . . .	55	20	. . .	"	22.		
Globe Shirt Store, . . . . .	Shirts, . . . . .	. . .	75	. . .	"	22.		
Wright Bros. & Co, . . . . .	Parasols and umbrellas, . . . . .	100	200	. . .	"	22.		
Chambers & Co., . . . . .	Parasols, . . . . .	7	20	2	"	22.		
Young & Kelm, . . . . .	Paper boxes, . . . . .	2	28	1	"	23.		
Freeman & Reed, . . . . .	Shirts, . . . . .	6	20	1	"	23.		
Lewis & Kinselman, . . . . .	" . . . . .	10	30	2	"	23.		
M. S. Myerhoff & Co., . . . . .	Infants' cloaks and dresses, . . . . .	8	27	1	"	23.		
M. S. Hager, . . . . .	Shoes, . . . . .	37	3	7	"	24.		
Arthur Frick, . . . . .	Perfumery, . . . . .	15	12	2	"	24.		

Factory Name	40	10	10	10	24	Dismissal Details	Compliance
Eloch & Schelm, . . . . .	40	10	10	10	24	Dismiss one child under 12, . . . . .	Complied.
F. Shrettle, . . . . .	35	113	1	25	24,	Dismiss three children under 12, . . . . .	"
Frishmuth Bros. & Co., . . . . .	140	60	3	25	24,		
Partridge & Richardson, . . . . .	63	12	5	5	25,		
E. Thalig & Co., . . . . .	6	25	1	8	25,	Dismiss one child under 12, . . . . .	Complied.
Penna. Buttonhole Manfg Co., . . . . .	25	75	1	1	26,		
A. Schmidt, . . . . .	2	28	1	5	26,	Dismiss one child under 12, . . . . .	Complied.
J. M. Hansell, . . . . .	12	16	10	10	26		
Pennsylvania Button Works, . . . . .	15	50	10	10	26,		
Pearl Shirt Factory, . . . . .	50	500	2	13	23,	Dismiss two children under 12, . . . . .	Complied.
A. Wilbur & Sons, . . . . .	55	20	1	1	25		
Croxtan, Wood & Co., . . . . .	66	40	10	10	29,		
Krecker & Co., . . . . .	3	32	2	12	29,	Dismiss two children under 12, . . . . .	Complied.
Hirsh & Bro., . . . . .	200	350	36	36	29,		
Gumpert Bros., . . . . .	150	100	3	22	29,	Dismiss three children under 12, . . . . .	Complied.
Simmons Bros. & Co., . . . . .	225	125	36	36	29,		
Wm. Murphy & Sons, . . . . .	33	70	25	25	30,		
Pulaski & Co., . . . . .	15	15	1	1	30,		
Dr. Jayne & Son, . . . . .	60	49	1	1	30,		
Stephen Green, . . . . .	105	15	15	15	30		
A. C. Yates & Co., . . . . .	70	5	15	15	30		
Thomas M. Price, . . . . .	45	15	15	15	Oct 1		
Wm. M. Christy & Sons, . . . . .	20	5	7	7	1,		
Ed. Roggsweiler, . . . . .	7	13	1	1	1,	Comply with sections 10 and 12, . . . . .	Complied.
John Graff, . . . . .	4	13	1	1	1,	Water closets for females, . . . . .	"
Peterlein Bros., . . . . .	85	15	1	1	1		
Henry B. Grauly, . . . . .	45	15	2	2	2,		
Millward Cliff, . . . . .	77	18	3	3	2,		
Thos. J. Jeffers, . . . . .	2	28	10	10	2,		

## STATISTICS OF FACTORIES—PHILADELPHIA—Continued.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured.	NUMBER EMPLOYED.				Sanitary condition.	Date of inspection	Orders given.	Compliance.
		Males.	Females	Under 12.	12 to 16.				
Wm. R. Warner & Co., . . . . .	Chemists, . . . . .	8	12	..	..	Good.	Oct.		
David Stern, . . . . .	Children's cloaks, . . . . .	125	175	..	15	..	3		
Technor & Frank, . . . . .	Jerseys, . . . . .	40	160	1	2	..	3.	Dismiss one child under 12, . . . . .	Complied.
Ed. J. Howlett & Son, . . . . .	Paper bags, . . . . .	21	15	..	9	..	4.		
W. H. Hoskins, . . . . .	Stationery, . . . . .	71	37	..	..	..	6.	Gate to elevator; also fire escape.	
Western Union Telegraph Company, . . . . .	Telegrams . . . . .	746	54	..	332	..	6.		
Eastman & Bro., . . . . .	Perfumery, . . . . .	23	27	..	6	..	6.		
MaeKeller, Smith, Jordan & Co., . . . . .	Type foundry, . . . . .	300	..	..	75	..	6.		
Rosencau Bros., . . . . .	Straw goods, . . . . .	20	40	..	6	..	6.		
H. Muhr's Sons, . . . . .	Jewelry . . . . .	499	126	3	50	..	6.	Dismiss three children under 12 . . . . .	Complied.
J. Roggenberger & Sons, . . . . .	Paper boxes, . . . . .	6	50	..	..	..	7.		
A. M. Oliver, . . . . .	Shoes, . . . . .	20	15	..	..	..	7.		
Walter S. Berg, . . . . .	Parasols and lamp shades, . . . . .	2	28	..	..	..	7.		
Allen & Martin, . . . . .	Shoes, . . . . .	35	30	..	..	..	7.		
Wilson Biscuit Company, . . . . .	Crackers, . . . . .	120	80	..	20	..	7.		
T. Kenworthy & Bro., . . . . .	Woolen goods, . . . . .	30	80	1	24	..	8.	Dismiss one child under 12, . . . . .	Complied.
Sheip & Vandergrift, . . . . .	Cigar boxes, . . . . .	59	126	..	..	..	8.		
Royal Shirt Company, . . . . .	Shirts, . . . . .	200	300	5	69	..	8.	Dismiss five children under 12, . . . . .	Complied.
Henry Schmidt, . . . . .	Paper boxes, . . . . .	20	45	1	15	..	8.	Dismiss one child under 12, . . . . .	"
Rawson Manufacturing Company, . . . . .	Wire springs, . . . . .	44	6	..	4	..	9		



	43	35	9	9.	
Stuart Bros. . . . .	Blank books . . . . .	43	35	9	
Huguenenele & Beeklar. . . . .	Gents furnishing goods. . . . .	5	20	10	
J. H. Schenk. . . . .	Laboratory. . . . .	9	10	10	
N. B. Cox & Co., . . . . .	Shoes . . . . .	55	20	10	
C. W. Hill. . . . .	" . . . . .	55	20	10.	
Jacob Datz. . . . .	Corsets. . . . .	5	145	10.	
Taylor & Carr. . . . .	Shoes. . . . .	45	15	10.	
Stanley G. Flagg & Co., . . . . .	Iron . . . . .	260	14	10.	Comply with sections 8, 9 and 12, . . . . .
Schlechter Jute Cordage Company. . . . .	Rope, . . . . .	80	1	13.	Dismiss one child under 12. . . . .
Geo. DeB. Keim & Co., . . . . .	Horse clothing. . . . .	100	50	13.	Shaft to box; bell ordered. . . . .
Ketterlinus. . . . .	Printing. . . . .	122	28	13	
Barnes Laundry. . . . .	Laundry. . . . .	18	60	13.	
Fred Jones & Co. . . . .	Blank books. . . . .	15	20	14.	
Lewis Weinberger, . . . . .	Lace caps, . . . . .	4	15	14	
S. S. Fretz. . . . .	Parasols . . . . .	100	150	14.	Dismiss three children under 12, . . . . .
H. Bernstein. . . . .	Dress trimmings. . . . .	5	16	14.	
F. Hassler. . . . .	Parasols, . . . . .	5	15	14.	
Wm. Mann. . . . .	Blank books, . . . . .	150	25	14.	
Wm. Mann & Co., . . . . .	" . . . . .	16	21	15.	
M. A. Shoneman. . . . .	Umbrellas, . . . . .	14	16	15.	
David Henley & Sons . . . . .	Artificial flowers. . . . .	15	165	15.	Dismiss five children under 12, . . . . .
Boyer Evans & Co., . . . . .	Bag factory. . . . .	12	20	16	
Lewis S. Bailey. . . . .	Cloaks. . . . .	30	20	16	
Jacob Langsdorf, . . . . .	Cigars, . . . . .	70	10	16.	
Philadelphia Local Telegraph Co., . . . . .	Stock department . . . . .	15	16	17	
Philip Houck, . . . . .	Paper boxes. . . . .	35	90	17.	
Jos. Adamson & Co., . . . . .	Braids. . . . .	25	150	17.	Dismiss seven children under 12. . . . .
Philip Doerr. . . . .	Carpets. . . . .	25	130	17.	
Thos. A. Pearce. . . . .	Hosiery, . . . . .	100	300	17.	Dismiss three children under 12, . . . . .

## STATISTICS OF FACTORIES—PHILADELPHIA—Continued.

NAME OF FACTORY OR WORKSHOP	Goods manufactured	NUMBER EMPLOYED.				Sanitary condition.	Date of inspection	Orders given.	Compliance.	
		Males.	Females	Under 12.						12 to 16.
H Riley . . . . .	Shirts, . . . . .	5	30	..	..	Fair,	Oct 16,			
E. R. Bailey . . . . .	Carpets, . . . . .	35	15	..	10	Good,	20.			
J. J. J. McConnell, . . . . .	Cotton yarns, . . . . .	30	15	..	10	..	20.			
J. C. Graham, . . . . .	Upholstery, . . . . .	75	95	..	29	..	20.			
Lalrd. Schober & Mitchell . . . . .	Shoes, . . . . .	375	175	..	30	..	20.			
Ohrie Bros., . . . . .	Trimmings, . . . . .	20	60	..	10	..	20.			
Wm H. Deisroth, . . . . .	Paper boxes, . . . . .	..	30	..	4	..	21.			
I Birge, . . . . .	Artificial flowers . . . . .	10	115	..	10	..	21			
Jno. Martel, . . . . .	.. . . . .	..	30	..	12	..	21.			
Howell, Stern & Co., . . . . .	Neckwear, . . . . .	5	45	..	..	..	21.			
C. & G. Sarsman, . . . . .	Hosiery, . . . . .	10	110	..	10	..	21.			
W. F. Shaw, . . . . .	Book bindery, . . . . .	28	12	..	..	..	21.			
M. Mendelsohn . . . . .	Paper boxes, . . . . .	5	20	..	..	..	21.			
S. F. Whitman & Son, . . . . .	Chocolates, . . . . .	50	50	..	..	..	22.			
Putsch & Rothschild, . . . . .	Neckwear, . . . . .	5	15	..	..	..	22.			
Jno. Steffington, . . . . .	Shoes, . . . . .	13	12	..	6	..	22			
Thos. Carriek & Co., . . . . .	Crackers, . . . . .	56	..	..	12	..	22			
A. D. Irwin, . . . . .	Yarns, . . . . .	20	30	..	9	..	22.			
Huylers, . . . . .	Candy, . . . . .	3	11	..	..	..	23			
Langfeld Bros. & Co., . . . . .	Leather goods . . . . .	150	150	..	17	..	23			



## STATISTICS OF FACTORIES—PHILADELPHIA—Continued.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured	NUMBER EMPLOYED.				Sanitary condition.	Date of inspection.	Orders given.	Compliance.
		Males.	Females.	Under 12	12 to 16.				
Frank Schoble, . . . . .	Hats, . . . . .	50	30	..	..	Good,	Nov. 4.		
William Bertsch, . . . . .	Blank books, . . . . .	25	25	..	9	"	4.		
Wm. B. Riley & Co., . . . . .	Horse clothing, . . . . .	6	45	..	1	"	5.		
Morrell Bros., . . . . .	Blank books, . . . . .	45	25	..	5	"	5.		
A. L. Hirsh, . . . . .	Spectacle cases, . . . . .	8	12	..	3	"	5.	Bell ordered to elevator. . . . .	Complied
L. C. Hall, Jr., & Co., . . . . .	Blank books, . . . . .	2	24	..	6	"	5.		
Oberteuffer & Martin, . . . . .	" . . . . .	10	11	..	1	"	5		
Philadelphia Towel and Supply Co., . . . . .	Laundry, . . . . .	7	25	..	..	"	6,	Bell ordered in engineer's room, . . . . .	Complied.
John Y. Noble, . . . . .	Blank books and publishers,	220	180	..	12	"	6.	Gong ordered in engineer's room, . . . . .	"
Nonpareil Laundry, . . . . .	Laundry, . . . . .	6	45	..	..	"	6.	Guard elevators.	
W. J. Adams, . . . . .	Merchandise, . . . . .	110	25	..	..	"	6.		
Central Newspaper Union, . . . . .	Periodicals, . . . . .	47	3	..	7	"	7.		
Henry Daniels, . . . . .	Blank books, . . . . .	21	..	..	5	"	7.		
W. W. Cbew, . . . . .	" . . . . .	35	..	..	7	"	7.		
Jos. K. Davidson, . . . . .	" . . . . .	23	..	..	3	"	7.		
McLoughlin & Co., . . . . .	" . . . . .	34	6	1	4	"	10,	Dismiss one child under twelve, . . . . .	Complied.
Well's Manufacturing Company, . . . . .	Braided wire, . . . . .	28	12	..	1	"	10,	Trap and new cable to elevator; bell in en-	
Henry Tetlow, . . . . .	Cosmetics, . . . . .	5	40	..	3	"	10.	gineer's room.	
F. W. Klinger, . . . . .	Blank books, . . . . .	23	12	..	3	"	11.		
Henry J. Bartle, . . . . .	" . . . . .	10	6	..	4	"	11		



Oliver Braden & Co.,	9	5	5	11.
Henry H. Brooks,	10	7	4	12.
Francis Diamant,	9	5	6	12.
Fred Schofield,	43	35	6	12.
Alex Abrams,	11	8	3	12.
Allen. Lane & Scott.	176	14	18	13.
Henry B. Ashmead,	50	30	15	14.
W. A. Auner,	10	7	4	14.
W. E. Bayer,	10	6	4	15.
Keystone Shirt Company,	15	85	1	14.
Burk & McFetridge,	76	4	12	17.
Klein, Putzel & Co.,	10	10	2	17.
Clawson Bros.,	2	10	..	17.
Collins Printing Company,	35	10	3	17.
Wolfe & Co.,	41	14	12	18.
Wm. P. Kemp,	35	15	5	18.
M. J. Dornan,	86	14	6	18.
J. Koernke,	3	17	3	18.
Leader Publishing Company,	6	10	1	18.
Wm. K. Bellows,	9	6	5	19.
Chas. A. Bechter,	12	7	4	19.
F. W. Maurer & Sons,	15	70	14	19.
Joseph Potter,	10	50	..	19.
Blinder & Kelly,	9	5	5	20.
Milton H. Berger,	9	8	3	20.
Oxford Bindery,	35	80	14	24.
H. H. Brainard,	9	5	5	24.
George H. Buchanan & Co.,	9	7	5	24.
Burr & Burrows,	8	6	6	24.
Blank books and printing.				
Printing,				
Blank books,				
Shirts,				
Blank books,				
Boys clothing,				
Flavoring extracts				
Printing,				
Novelties,				
Printing,				
Blank books				
Cloaks,				
Printing,				
Upholstery trimmings.				
Straw works.				
Printing.				
Blank books				
Printing,				
Additional fire escape.				
Box three belts,				
Insufficient means of egress in case of fire.				
Fire escape.				
Bell to elevator.				
Bell in engineer's room.				
Completed.				

STATISTICS OF FACTORIES—PHILADELPHIA—Continued.

NAME OF FACTORY OR WORKSHOP	Goods manufactured	NUMBER EMPLOYED.				Sanitary condition.	Date of inspection.	Orders given.	Compliance
		Males	Females.	Under 12.					
				12 to 16.					
Alva Bushnell. . . . .	Blank books. . . . .	11	3	7	Good.	Nov. 24.			
O. P. Button. . . . .	" . . . . .	10	3	7	"	25.			
Herbert Canfield. . . . .	Printing. . . . .	13	6	7	"	25.			
Castle Helman. . . . .	" . . . . .	8	4	6	"	25.			
Hellwig & Co. . . . .	Silk dyers. . . . .	10	10	"	"	25			
Frank B. Davis, dyers. . . . .	Printing. . . . .	9	8	5	"	25.			
Charles Dixon. . . . .	Blank books. . . . .	10	7	5	"	25.			
Felster Printing Company. . . . .	Printing. . . . .	10	6	6	"	25.			
Wm. F. Fell. . . . .	Blank books. . . . .	10	5	5	"	25.			
Gillin & Nagle. . . . .	Printing. . . . .	8	6	5	"	25.			
Daniel F. Wilson. . . . .	Blank books. . . . .	9	5	5	"	25.			
George N. Holtz (printer). . . . .	Cards. . . . .	10	5	6	"	25.			

HARRISBURG, DAUPHIN COUNTY.

Mr. Wm. H. LEWIS, Deputy for District No. 2.

	16	2	..	..	Good.	Jan.	7
Harrisburg Woven Wire Mattress Co.	Wire wove mattresses. . . .	50	200	48	"	8.	
Harrisburg Silk Mill. . . . .	Silk. . . . .	67	23	2	"	7.	
Harrisburg Burial Case Company. . . . .	Burial cases. . . . .						

Dives, Pomeroy and Stewart . . .	Dry goods and merchandise,	20	30	..	..	..	8.
Monaghan-Bay Company, . . . . .	Boots and shoes	150	100	..	..	..	7.
Harrisburg Handle Factory, . . . . .	Handles, . . . . .	20	..	..	..	..	14.
Capital Shirt Factory, . . . . .	Shirts, . . . . .	10	110	..	8	..	14
Harrisburg Boot and Shoe Co., . . .	Boots and shoes, . . . . .	100	100	..	..	..	14.

LANCASTER, LANCASTER COUNTY.

		20	14	..	6	Good,	Jan.	15.	Complied
Conestoga Cigar Factory. . . . .	Cigars, . . . . .	20	14	..	..	..	15.	15.	Hours of labor contrary to law. . . . .
Conestoga Cigar Factory. . . . .	" . . . . .	2	8	..	3	..	15.	15.	
Lancaster Planing Mill, . . . . .	Sashes and blinds, . . . . .	28	..	..	..	..	15.	15.	..
Conestoga Steam Cotton Mill No. 1, . . . . .	Cotton goods, . . . . .	92	160	..	49	..	16.	16.	
Conestoga Steam Cotton Mill No. 2 & 3 . . . . .	Cotton, . . . . .	300	500	..	48	..	16.	16.	..
H. A. Shirk & Sons, . . . . .	Cotton yarns, . . . . .	31	54	..	9	..	16.	16.	
J. S. Glehn & Sons, . . . . .	Cigars, . . . . .	25	50	..	15	..	16.	16.	..
Lancaster Umbrella Factory. . . . .	Umbrellas, . . . . .	50	160	..	15	..	16.	16.	
Lancaster Cork Work. . . . .	Corks, . . . . .	5	25	..	..	..	17.	17.	..
Conestoga Cork Works . . . . .	" . . . . .	89	71	..	40	..	17.	17.	
J. L. Metzgar & Co., . . . . .	Cigars, . . . . .	30	40	..	..	..	17	17	..
Keystone Standard Watch Co., . . . . .	Watch movements, . . . . .	100	150	..	18	..	17.	17.	
Phoenix Cork Works, . . . . .	Corks, . . . . .	33	17	..	22	..	17.	17.	..
Williamson & Foster, . . . . .	Dry goods, notions and trunks	34	11	..	2	..	21.	21.	
Philip Lebzelter, . . . . .	Carriages, . . . . .	28	..	..	..	..	21.	21.	..
Hager Bros., . . . . .	Dry goods, notions and carpets	48	12	..	..	..	21.	21.	
Palace of Fashion, . . . . .	Dry goods, notions and millinery,	10	65	..	4	..	21.	21.	..
Trout & Schenk, . . . . .	Shirts, . . . . .	..	18	..	..	..	22.	22.	
Lancaster Comb Factory, . . . . .	Combs, . . . . .	25	10	..	5	..	22.	22.	

## STATISTICS OF FACTORIES—LANCASTER—Continued.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured.	NUMBER EMPLOYED.			Sanitary condition.	Date of inspection.	Orders given.	Compliance.
		Males.	Females.	Under 12. 12 to 16.				
New York Store, . . . . .	Dry goods, etc., . . . . .	37	13	4	Good, Jan 22.			
Inquirer Printing and Publishing Co., . . . . .	Printing, publishing and book binding, . . . . .	55	15	..	" 22.			
Reist & Co., . . . . .	Cigars, . . . . .	13	7	1	" 23.			
Herr & Welder, . . . . .	" . . . . .	17	13	..	" 23.			
Oblinger Bros. & Co., . . . . .	" . . . . .	110	50	5	" 23.			
Osborne & Co., . . . . .	Umbrella handles and novelties, . . . . .	99	10	7	" 24.			
Lancaster Flour Sack Company, . . . . .	Flour sacks, . . . . .	2	8	..	" 24.			
Richard Blickensderfer, . . . . .	Machinery, . . . . .	45	..	1	" 24.			
Lancaster Caramel Company, . . . . .	Caramels, . . . . .	75	175	57	" 24.			
Huber, Holman & Co., . . . . .	Confectionery, . . . . .	25	15	10	" 24.		Egress in case of fire insufficient, . . . . .	Complied.
John F. Reed & Co., . . . . .	Cigars, . . . . .	100	100	10	" 24.			
James Prangle & Son, . . . . .	" . . . . .	8	7	2	" 24.			

## LEBANON, LEBANON COUNTY.

Lebanon Industrial Works, . . . . .	Shirts and handkerchiefs, . . . . .	25	325	10	Good, Jan. 28.		
T. B. Long, . . . . .	Cigars, . . . . .	7	12	4	" 28.		
G. Moyer, . . . . .	" . . . . .	15	5	3	" 28		



Hauer & Bro., . . . . .	75	25	6	28.	Express in case of fire insufficient. . . . . Complied.
Rauch & Bro., . . . . .	2	23	..	28.	
Lebanon Watch Company, . . . . .	19	29	15	29.	
D. B. Long Cigar Factory, . . . . .	60	30	6	29.	
Excelsior Novelty Works, . . . . .	12	4	4	29.	
Lebanon Box Factory, . . . . .	7	5	..	29.	
Lebanon Shoe Factory, . . . . .	18	10	1	29.	
Blustein & Hahn, . . . . .	6	7	3	29.	
Lebanon Soap Works, . . . . .	15	5	8	30.	
Soap, . . . . .					

## READING, BERKS COUNTY.

Excelsior Steam Laundry, . . . . .	7	14	..	Good.	Feb.	5.
Reading Cigar Box Factory, . . . . .	12	14	..	..	..	5.
Reading Cotton Lap Mills, . . . . .	4	10	1	..	..	5.
Reading Cotton Mills, . . . . .	90	200	80	..	..	5.
Reading Rope Factory, . . . . .	67	59	61	..	..	5.
Reading Silk Mill, . . . . .	75	325	12	..	..	5.
Leinback Woolen Mills, . . . . .	32	28	12	..	..	6.
Reading Paper Mill, . . . . .	72	50	..	..	..	6.
Hammond & Bobst, . . . . .	14	11	..	..	..	6.
Pennsylvania Hardware Works, . . . . .	382	45	35	..	..	6.
Stemberg Nut and Bolt Works, . . . . .	400	..	20	..	..	6.
Rlek Bros., . . . . .	136	..	24	..	..	6.
Reading Spectacle Factory, . . . . .	50	140	12	..	..	7.
Herbert Bros., . . . . .	40	45	6	..	..	7.
Yocum Bros., . . . . .	90	60	12	..	..	7.
Reading Knitting Mills, . . . . .	10	165	10	..	..	7.
Laundry, . . . . .						
Cigar boxes, . . . . .						
Cotton goods, . . . . .						
Ropes, . . . . .						
Silk, . . . . .						
Woolen goods, . . . . .						
Paper, . . . . .						
Felt hats, . . . . .						
Hardware supplies, . . . . .						
Nuts, bolts and washers, . . . . .						
Hardware, . . . . .						
Spectacles, . . . . .						
Cigars, . . . . .						
Hostery, . . . . .						

## STATISTICS OF FACTORIES—READING, BERKS COUNTY—Continued.

NAME OF FACTORY OR WORKSHOP	Goods manufactured.	NUMBER EMPLOYED.			Sanitary condition.	Date of inspection.	Orders given.	Compliance.
		Males.	Females	Under 12. 12 to 16.				
G. C. Frame, . . . . .	Cigars, . . . . .	45	40	..	Good,	Feb 7.		
Rufe & Co. . . . .	" . . . . .	40	35	.. 6	"	7.		
Hirschland & Samuel. . . . .	Pants, . . . . .	9	18	..	Bad,	10	Erect fire escape and water closets ordered, . .	Complied.
G. L. Moyer & Bros., . . . . .	Shoe uppers, . . . . .	4	10	..	Good,	10.		
James S. Bruster, . . . . .	Shirts, . . . . .	5	20	..	"	10		
Jacob L. Well, . . . . .	Pants, . . . . .	1	24	..	"	10.		
J. C. Illig & Bro., . . . . .	Dry goods, etc . . . . .	11	7	..	"	10		
C. H. Whitner & Sons, . . . . .	" . . . . .	14	11	..	Bad,	10.	Insufficient number of water closets. . . . .	Complied.
Kline & Eppenhelmer, . . . . .	" . . . . .	40	30	.. 10	Good,	11.		
Augustine Roland. . . . .	Umbrellas, . . . . .	2	12	..	"	10.		
Dives, Pomeroy & Stewart. . . . .	Dry goods, etc., . . . . .	70	40	.. 15	"	11.		
J. Mould & Co., . . . . .	" . . . . .	15	10	.. 3	"	11.		
J. S. Shade, . . . . .	" . . . . .	12	7	.. 3	"	11.		
Glaser, Frame & Co., . . . . .	Cigars, . . . . .	68	82	.. 29	"	11		
Kendel Bros. Son & Co., . . . . .	Hats, . . . . .	95	45	.. 9	"	11		
C. T. Kessler & Son, . . . . .	Woolen hats, . . . . .	29	21	.. 15	"	11		
Reading Hardware Company, . . . . .	Builder's hardware. . . . .	750	50	.. 100	"	12.		
J. G. Mohn & Co., . . . . .	Hats, . . . . .	65	29	.. 16	"	12.		
D. F. Lotz & Co., . . . . .	" . . . . .	25	10	.. 4	"	12		
H. B. Hendel & Co., . . . . .	" . . . . .	80	40	.. 4	"	12.		

W. H. Reinohl & Co.	..	40	17	6	..	12.	Working hours contrary to law. . . . .	Complied
J. R. Miller & Co.	..	70	45	..	..	12.		
G W Alexander & Co.	..	66	37	17	..	13.		
R. H Savage & Co.	..	89	36	..	..	13		
F. C Wertz & Co	..	35	..	14	..	13.		
A. Thalheimer,	..	20	23	5	..	13.	Erect fire escapes . . . . .	Complied.
I. Nolde & Co.,	..	5	70	43	..	13.	..	..
Boyer & Hellig,	..	10	13	4	..	13.		
Fisher & Poorman,	..	1	27	4	..	14		
Danah & Co.,	..	1	29	4	..	14.		
H. D. Bowman & Son.	..	7	20	6	..	14.		
Curtis, Jones & Co.,	..	35	15	4	..	14.		
Reading Glass Works,	..	55	..	16	..	14.		
C. L. Van Reed,	..	2	10	..	..	14.		

ALLENTOWN, LEHIGH COUNTY.

Roney & Berger,	Boots and shoes	18	12	3	Good,	Mar.	7.	
W H. Ryan,	Paper boxes.	4	21	6	..	7	7	
Seaton & Peddley	Silk throwsters	25	40	10	..	7.	7.	
Bitner & Hunsicker,	Stockings,	2	46	3	..	7.	7.	
H. Leh & Co ,	Boots and shoes,	105	45	16	..	7.	7.	
John E. Lentz,	..	100	35	3	..	7.	7.	
Rhue Bros	Cigars,	32	28	5	..	10.	10.	
Eagle Steam Cigar Box Factory,	Cigar boxes,	7	8	..	..	10.	10.	
Hartung & Schneider,	Shoes,	28	12	3	..	10	10	
Wolfe Shoe Factory,	"	37	18	3	..	10.	10.	
Adelaide Silk Mill.	Silk ribbons and dress goods,	185	490	100	..	11.	11.	

## STATISTICS OF FACTORIES—ALLENTOWN, LEHIGH COUNTY—Continued.

NAME OF FACTORY OR WORKSHOP	Goods manufactured.	NUMBER EMPLOYED.				Sanitary condition	Date of inspection.	Orders given.	Compliance	
		Males	Females.	Under 12.						12 to 16
Pioneer Silk Mill. . . . .	Silk ribbons, . . . . .	75	275	..	75	Good.	Mar. 11.			
C. A. Dooney & Co. . . . .	Furniture. . . . .	180	..	..	15	"	11.	Erect fire escapes, . . . . .	Complied.	
T. A. Rhen & Bro., . . . . .	Parlor furniture, . . . . .	35	..	..	15	"	12.			
E. J. Schneek & Co., . . . . .	Table and ball stands, . . . . .	65	..	..	6	"	12.			
Allentown Spinning Company. . . . .	Jute goods, . . . . .	150	300	..	95	"	12.	Erect fire escapes, . . . . .	Complied.	
Kleunter & Yeager, . . . . .	Parlor furniture, . . . . .	160	..	..	20	"	13			
Iowa Barb Wire Company, . . . . .	Barbed wire, . . . . .	400	..	..	..	"	13.			
Allentown Rolling Mill Company. . . . .	Bar iron, . . . . .	800	..	..	..	"	13.			
Johnston, Swartz & Co., . . . . .	Furniture, . . . . .	80	..	..	..	"	13.			
Hunsicker & Co., . . . . .	Cigars, . . . . .	6	8	..	..	"	13.			

## BETHLEHEM, NORTHAMPTON COUNTY.

NAME OF FACTORY OR WORKSHOP	Goods manufactured.	Males.	Females.	Under 12.	12 to 16	Sanitary condition	Date of inspection.	Orders given.	Compliance
Cutter Silk Manufacturing Co., . . . . .	Silk goods, . . . . .	100	300	..	81	Good.	Mar. 14		
Fichter & Martin, . . . . .	Silk ribbons, . . . . .	50	90	..	25	..	14.		
Bethlehem Silk Company, . . . . .	Silk, . . . . .	81	125	..	143	..	14.		
Lapp & Sutton, . . . . .	Silk goods, . . . . .	75	125	..	45	..	15		
Excelsior Knitting Mills, . . . . .	Hosiery, . . . . .	20	130	..	37	..	15		



CATASAUQUA, LEHIGH COUNTY

Unicorn Silk Manufacturing Co.	Silk goods and plushes	128	192	80	Good	Mar. 17,	Egress in case of fire insufficient.	Mill destroyed by fire
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COLUMBIA, LANCASTER COUNTY.

Genl Cigar Factory.	Cigars.	15	25	..	Good.	Jan. 27		
Columbia Shirt Factory.	Shirts.	4	61	4	..	27.		
Bitner Cigar Factory.	Cigars.	3	8	..	..	27.		

MANHEIM, LANCASTER COUNTY.

Hahn & Fry.	Cigars and cigar boxes.	16	14	6	Good.	Jan 31.		
C. H. Young.	Cigars.	25	10	..	..	31.		
C. F. Fisher.	..	10	12	1	..	30.		
T. S. Beck.	..	8	10	..	..	30.		
H. C. Pritz.	..	8	12	..	..	30.		
Enterprise Hosiery Company.	Hosiery.	6	79	10	..	30		

WILKES-BARRE, LUZERNE COUNTY.

Hess, Goldsmith & Co.	Silk dress goods.	30	250	35	Good.	July 11.	Belt and machinery to be guarded.	Complied
Lace Manufacturing Company.	Lace curtains.	75	175	50	..	11.	Erect fire escape.	..
Galland Bros. & Co.	Ladies' underwear.	12	250	20	..	11.		

STATISTICS OF FACTORIES—BINCKLEY'S BRIDGE, LANCASTER COUNTY.  
Mr. JOHN F. LITTLE, Deputy for District No. 2.

NAME OF FACTORY OR WORKSHOP	Goods manufactured.	NUMBER EMPLOYED				Sanitary condition.	Date of inspection	Orders given.	Compliance
		Males.	Females.	Under 12.	12 to 16.				
James Symington & Co., . . . . .	Paper, . . . . .	18	5	. . .	. . .	Good.	Oct. 1.		

WRIGHTSVILLE, YORK COUNTY.

Jacob Kline, . . . . .	Cigars . . . . .	6	27	..	3	Good.	Sept	30		
S. H. Kocher, . . . . .	" . . . . .	20	16	..	7	"		30		
D. S. Detweiler, . . . . .	" . . . . .	28	25	..	3	"		30		
Wrightsville Hardware Company, . . . . .	Hardware . . . . .	45	4	..	3	"		30		

EPHRATA, LANCASTER COUNTY

Alfred Ressler, . . . . .	Cigars. . . . .	1	10	..	1	Good.	Oct.	8.		
I. R. Brown, . . . . .	Cigar boxes, . . . . .	8	10	..	3	"		8.		
Joseph Cooper, . . . . .	Cigars, . . . . .	46	14	..	..	"		8.		
Martin Kinport, . . . . .	Cigar boxes, . . . . .	10	10	..	1	"		8		
Martin Kinport, . . . . .	Cigars, . . . . .	56	55	1	12	"		8.	Dismiss one child under 12, . . . . .	Complied
B Mentzer, . . . . .	" . . . . .	45	30	..	..	"		8		

ROTHSVILLE, LANCASTER COUNTY.

James A. Hettler, . . . . .	Cigars, . . . . .	10	10	. . . . .	Good, . . . . .	Oct. 1.	1.
Mrs. K. Peters, . . . . .	" . . . . .	9	10	. . . . .	1 ..	1.	1.
P. G. Garner, . . . . .	" . . . . .	6	6	. . . . .	..	1.	1.
J. G. Lusner, . . . . .	" . . . . .	20	2	. . . . .	..	1.	1.

AKRON, LANCASTER COUNTY.

C. W. Zwalley, . . . . .	Cigars, . . . . .	24	11	. . . . .	Good, . . . . .	Oct. 1.	1.
P. W. Weichman, . . . . .	Cigar boxes, . . . . .	8	10	. . . . .	1 ..	2.	2.
H. S. Keller, . . . . .	Cigars, . . . . .	20	10	. . . . .	..	2.	2.
David Snader, . . . . .	" . . . . .	23	7	. . . . .	1 ..	2.	2.
Elias Wolf, . . . . .	" . . . . .	33	7	. . . . .	3 ..	2.	2.

BROWNSTOWN, LANCASTER COUNTY.

J. L. Mumma, . . . . .	Cigar boxes and furniture, . . . . .	14	16	. . . . .	4 Good, . . . . .	Oct. 1.	1.
Wm. McLaughlin, . . . . .	Cigars, . . . . .	10	3	. . . . .	..	1.	1.
J. R. Buch & Son, . . . . .	" . . . . .	7	6	. . . . .	2 ..	1.	1.
L. R. Brown, . . . . .	" . . . . .	11	4	. . . . .			

BRUNNERVILLE, LANCASTER COUNTY.

M. S. Hornberger, . . . . .	Cigars, . . . . .	3	11	. . . . .	3 Good, . . . . .	Oct. 8.	8.
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## STATISTICS OF FACTORIES—COLUMBIA, LANCASTER COUNTY.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured.	NUMBER EMPLOYED.			Sanitary condition.	Date of inspection.	Orders given.	Compliance.
		Males.	Females.	Under 12. 12 to 16.				
John Fendrich & Son. . . . .	Cigars. . . . .	19	11	..	Good.	Sept. 29.		
Wm. H. Lucas. . . . .	Shirts. . . . .	3	57	5	..	29.		
Keeley Stove Company. . . . .	Stoves. . . . .	154	..	12	..	29.		
Wilson's Laundry and Machine Co.. . . . .	Machinery. . . . .	55	..	2	..	29.		
Columbia Wagon Company. . . . .	Wagons. . . . .	36	..	4	..	29.		

## LINCOLN, LANCASTER COUNTY.

Benjamin Wisler. . . . .	Cigars. . . . .	8	12	..	Good.	Oct. 8.		
A. T. Wommet. . . . .	.. . . .	10	10	2	..	8.		

## LANCASTER, LANCASTER COUNTY.

Lancaster Caramel Company. . . . .	Caramels. . . . .	175	275	169	Good.	Oct. 3.		
Osborne & Co.. . . . .	Gold and silver novelties. . . . .	108	42	20	..	Nov. 11.		
Jos. M. Ribert. . . . .	Chaser, sinker and mould works. . . . .	9	43	1	..	11.		
Rose Bros. & Hartman. . . . .	Umbrellas. . . . .	89	180	55	..	11		



LITITZ, LANCASTER COUNTY.

Harry S. Meiskey, . . . . .	Cigars. . . . .	5	20	3	Good.	Oct.	8.
Henry S. Frederick, . . . . .	.. . . .	20	15	..	..	Oct.	8.

MARLETTA, LANCASTER COUNTY.

P. C. Fulweiler, . . . . .	Cigars. . . . .	88	24	16	Good.	Oct.	9.
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TERRE HILL, LANCASTER COUNTY.

Jesse Showalter, . . . . .	Cigars, . . . . .	12	13	..	Good.	Oct.	10.
Dillworth Bros., . . . . .	.. . . .	37	45	10	..	Oct.	10.
S. S. Watt, . . . . .	.. . . .	26	14	2	6	10.	Dismiss two children under 12. . . . .
Sol. Lessley, . . . . .	Cigars and cigar boxes. . . . .	2	15	2	..	10.	Complied.
R. H. Davis, . . . . .	Cigars. . . . .	8	13	..	..	10.	
Amos M. Cline, . . . . .	.. . . .	50	60	13	..	10.	

MARTINDALE, LANCASTER COUNTY.

Dillworth Bros., . . . . .	Cigars. . . . .	15	12	4	Good.	Oct.	11.
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## STATISTICS OF FACTORIES—NEW HOLLAND, LANCASTER COUNTY.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured.	NUMBER EMPLOYED.				Sanitary condition.	Date of inspection.	Orders given.	Compliance.
		Males.	Females.	Under 12.	12 to 16.				
Billworth Bros.. . . . .	Cigars, . . . . .	23	27	..	1	Good.	Oct. 10.		

## MANHEIM, LANCASTER COUNTY.

Lauterbaucher & Emerich, . . . . .	Hosiery, . . . . .	5	60	11		Good.	Nov. 6.		
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## STEVENS, LANCASTER COUNTY.

McKee Cigar Company, . . . . .	Cigars, . . . . .	10	10	10	10	Good.	Nov. 6.		
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## READING, BERKS COUNTY.

Reading Silk Mill, . . . . .	Silk, . . . . .	25	200	57		Good.	Nov. 7.		
F. S. Wertz & Co., . . . . .	Crackers and biscuits, . . . . .	43	17	17		"	7.		

YORK.

P. C. Weist & Co..	Caramels,	239	253	128	Good,	Nov.	12.	Comply with sections 1, 2 and 3.
Schriver & Esinger.	Cigars,	35	15	3	"	12.	12.	Comply with sections 2 and 3.
Holzman Manufacturing Co..	Ladies' underwear	3	97	3	"	12.	12.	Comply with sections 1, 2 and 3.
Paragon Cigar Factory.	Cigars.	38	27	3	"	13.	13.	Comply with sections 1, 2 and 3.
Steam Cigar Box Factory,	Cigar boxes,	25	25	3	"	13.	13.	Comply with sections 1, 2 and 3.
'Chas. A. Bayler,	Cigars.	45	45	8	"	13.	13.	Comply with sections 1, 2 and 3.
Click Cigar Factory.	"	55	75	3	15	"	13.	Comply with sections 1, 2, 3 and 12.
S. S. Flinchbaugh,	"	15	9	1	3	"	13.	Comply with sections 1, 2, 3 and 12.
York Match Co..	Matches,	25	75	..	..	"	13.	
York Wire Cloth Co..	Wire cloth,	15	45	..	..	"	13.	
Standard Cigar Factory,	Cigars and cigar boxes,	94	46	11	"	14.	14.	Comply with sections 1, 2 and 3.
Thomas & Winter,	Cigar boxes,	12	13	2	Fair,	14.	14.	Comply with sections 1, 2, 3 and 10.
J. K. Psaltzgroff & Co.,	Cigars,	31	11	1	Good,	14.	14.	Comply with sections 1, 2 and 3.
Myers & Adams,	"	21	11	5	"	14.	14.	Comply with sections 1, 2 and 3.
David Farry.	"	10	10	1	..	14.	14.	Comply with sections 1, 2 and 3.

GLEN ROCK, YORK COUNTY.

Glen Rock Cordage and Rope Co..	Rope and cordage,	9	7	5	Good.	Nov.	21.
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HOLTZ, YORK COUNTY.

G. W. Holtzinger,	Cigars,	4	10	..	Good.	Nov.	18.
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STATISTICS OF FACTORIES—FREYSVILLE, YORK COUNTY.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured.	NUMBER EMPLOYED.				Sanitary condition.	Date of inspection.	Orders given.	Compliance.
		Males.	Females.	Under 12.	12 to 16.				
Daniel Anstein, . . . . .	Cigars, . . . . .	7	10	..	4	Good,	Nov. 18,	Comply with section 2 and 3.	

SPRING GROVE, YORK COUNTY.

Spring Grove Paper Mill, . . . . .	Paper, . . . . .	107	32	..	Good,	Nov. 19,	Post notices.	
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HANOVER, YORK COUNTY.

H. A. Balr, . . . . .	Cigar boxes. . . . .	8	10	..	Good,	Nov. 19,	Post notices.	
S. H. Bechtel & Son. . . . .	Hosiery, . . . . .	..	15	..	..	19.		
S. H. Bechtel & Son, . . . . .	Cigar boxes, . . . . .	8	10	..	..	19,	Comply with section 12 in regard to elevator.	
Balr & Bro., . . . . .	Cigars, . . . . .	10	10	..	..	20.		
Hanover Shoe Co., . . . . .	Shoes, . . . . .	23	19	..	..	20.		
Jesse Frysinger, . . . . .	Cigars, . . . . .	35	20	..	..	20.		
Hanover Cordage Co., . . . . .	Rope and cordage. . . . .	30	20	..	..	20.	Post notices.	
Louis G. Psass, . . . . .	Cigars, . . . . .	16	10	..	..	20.		
Imperial Cigar Co., . . . . .	" . . . . .	15	10	..	..	20.		
Hanover Glove Co., . . . . .	Gloves, . . . . .	10	11	..	..	20.	Post notices.	



## SEVEN VALLEY, YORK COUNTY.

Keystone Cigar Factory. . . . .	Cigars. . . . .	80	25	10	Good.	Nov. 21.	Comply with sections 2 and 3.
Henry C. Kuntz. . . . .	" . . . . .	23	12	4	"	21,	Comply with sections 2 and 3.

## TYRONE, BLAIR COUNTY.

Tyrone Paper Co. . . . .	Paper. . . . .	150	39	1	Good.	Nov. 25.	Comply with sections 2, 3 and 12.
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## McSHERRYSTOWN, ADAMS COUNTY.

L. E. Martin & Co., . . . . .	Cigars. . . . .	30	40	..	Good.	Nov. 20.	Comply with sections 2 and 3.
Conewago Steam Cigar Box Factory. . . . .	Cigar boxes. . . . .	8	13	2	"	20.	Comply with sections 2 and 3.
F. K. Smith, . . . . .	Cigars. . . . .	32	15	1	"	20.	Comply with sections 2 and 3.
Chas H. Bushby, . . . . .	" . . . . .	17	37	2	"	20.	Comply with sections 2 and 3.
Phoenix Cigar Co., . . . . .	" . . . . .	94	56	3	"	20.	Comply with sections 2 and 3 and erect fire escape.
Overbaugh, J. S., & Co., . . . . .	" . . . . .	13	12	..	"	20.	Post notices.

## DALLASTOWN, YORK COUNTY.

C. Kohler & Co. . . . .	Cigar boxes. . . . .	8	14	3	Good.	Nov. 18.	Comply with sections 2 and 3.
J. W. Minnick. . . . .	Cigars. . . . .	18	12	1	"	18.	Comply with sections 1, 2 and 3.
Adam Kohler. . . . .	" . . . . .	14	10	..	"	18,	Post notices and comply with section 10.
Leah Spatz. . . . .	" . . . . .	11	11	..	Fair.	.. . . .	Post notices and comply with section 10.

## STATISTICS OF FACTORIES—WINSORVILLE, YORK COUNTY.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured.	NUMBER EMPLOYED.			Sanitary condition.	Date of inspection.	Orders given.	Compliance.
		Males.	Females.	Under 12. 12 to 16.				
George W. Gable, . . . . .	Cigars, . . . . .	7	10	1	Fair,	Nov. 18,	Comply with sections 1, 2, 3 and 10.	
W. C. Smith, . . . . .	" . . . . .	4	10	..	Good,	18,	Comply with sections 1, 2 and 3.	

## HUNTINGDON, HUNTINGDON COUNTY.

Blair Keystore Building, . . . . .	Stationery, . . . . .	53	77	..	4	Good,	Nov. 26,	Comply with sections 2 and 3.
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## HARRISBURG, DAUPHIN COUNTY.

Chesapeake Nail Works, . . . . .	Nails, . . . . .	450	..	..	22	Good,	Nov. 28,	Comply with section 2.
Harrisburg Paper Box Factory, . . . . .	Paper boxes, . . . . .	6	23	..	..	..	29,	
Monaghan-Bay Co., . . . . .	Shoes, . . . . .	60	90	..	..	..	29,	
Harrisburg Boot and Shoe Co., . . . . .	Boots and shoes, . . . . .	100	50	..	..	..	29,	
Capital Shirt Factory, . . . . .	Shirts, . . . . .	..	52	..	6	..	29,	Comply with sections 2 and 3.
Brookwood Hosiery Co., . . . . .	Hosiery, . . . . .	5	25	..	8	..	29,	Comply with sections 2 and 3.

## PITTSBURGH.

Mrs. NAN Y. LESLIE, Deputy for District No. 3.

	Mercantile.	75	100	Good,	Mar. 15.	Water closets ordered.	Completed.
Campbell & Dick.	Merchandise.	245	130	.. 75	15.		
Joseph Horne & Co.,	"	25	15	.. ..	15.		
Biber & Easton,	House furnishing goods,	37	8	.. ..	Apr.		
W. H. Keech,	Lamps and glassware,	20	5	.. ..	2.		
Caritt & Pollock,	Groceries,	35	40	.. ..	2.		
Dillworth Bro.,	Dyeing, scouring, cleaning,	13	5	.. ..	3.		
Oswald Werner,	Groceries,	130	10	.. ..	3.		
Thomas C. Jenkins,	Carpet store,	45	15	.. ..	3.		
E. Getzinger,	Paper boxes,	15	30	.. ..	4.		
D. J. Rex & Co.,	Crackers,	6	9	.. ..	4.		
E. McGinn,	Book bindery,	5	12	.. 8	4.		
F. Gittens,	Cigars,	30	70	.. 1	4.		
R. & W. Jenkinson.	Dry goods and notions,	5	10	.. 1	4.		
J. H. Kunkel & Bro.,	Merchandise,	20	150	.. 23	4.		
Danzinger & Co.,	Millinery,	1	14	.. ..	4.		
Mrs. M. Joyce,	Sacks,	10	15	.. ..	4.		
B F. Veach,	Cigar and candy boxes,	15	14	.. ..	5.		
Star Cigar Box Factory,	Bread and crackers,	50	200	.. 36	5.		
S. S. Marvin,	Confectionery,	8	7	.. 2	5.		
J. K. McKee & Co.,	Shoe uppers,	29	65	.. ..	7.		
J. D. Chantler & Co.,	Furnishing and clothing,	235	15	.. 20	7.		
J. M. Guskey,	Newspaper and printing,	14	6	.. ..	7.		
City Minion Publishing Co.,	Exchange Bank,	60	20	.. 4	7.		
Joseph Eiehbaum,	Printing,	13	7	.. ..	7.		
Pittsburgh Printing Company,	Tinware,	36	40	.. 2	7.		
John Dunlap & Co.,							

## STATISTICS OF FACTORIES—PITTSBURGH—Continued.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured.	NUMBER EMPLOYED.				Sanitary condition.	Date of inspection.	Orders given.	Compliance.
		Males.	Females.	Under 12.	12 to 16.				
Kaufman Bros..	Merchandise.	140	30	15	15	Good.	April 8.		
G. H. Reed.	Book-binding.	8	12	..	..	..	8.		
Chronicle Telegraph.	Newspapers.	76	6	..	..	..	8.		
S. Ewart & Co..	Packing coffee.	23	9	..	..	..	8.		
Wm. P. Bennett.	Book-binding.	17	18	1	..	..	8.		
Myer, Shinkle & Co..	Printing.	25	5	7	..	..	9.		
Foster & Stevenson.	..	50	15	..	..	..	9.		
W. T. Nicholson.	Printing and binding.	18	7	..	..	..	9.		
A. G. Campbell & Sons.	Furnishing store.	45	40	2	..	..	10.		
Knable & Shuster.	Dry goods.	20	20	5	..	..	10.		
Oliver McClintock & Co..	Carpets, curtains and furniture.	65	35	3	..	..	10.		
S. D. Ache & Co..	Candy.	24	6	2	..	..	10.		
Boston Novelty Store.	Novelties.	4	8	4	..	..	10.		
B. Piccardo.	Macaroni and noodles.	7	3	..	..	..	10.		
C. H. Loyd.	Tailoring.	20	15	..	..	..	10.		
Collins & Wright.	Tin and britannia.	18	12	1	..	..	11.		
John Mence & Son.	Confectionery.	7	4	..	..	..	11.		
Best & Co..	Printing and binding.	15	4	1	..	..	11.		
H. J. Heintz & Co..	Pickling.	100	125	28	..	..	11.		



Horne & Ward. . . . .	Dry goods. . . . .	35	40	5	..	11.
Bovard, Rose & Co.. . . . .	Carpet store. . . . .	38	25	..	..	11.
John A. Irwin. . . . .	Book-binding. . . . .	17	13	..	..	11.
Geo. F. McDonald. . . . .	Candy. . . . .	11	25	..	..	11.
Matchett Paper Box Company. . . . .	Paper boxes. . . . .	11	26	2	..	12.
Murdoch, Kerr & Co.. . . . .	Printing. . . . .	35	9	1	..	12.
J. D. Bernd & Co.. . . . .	Millinery. . . . .	69	15	2	..	12.
Arbuckle & Co.. . . . .	Groceries. . . . .	69	30	..	..	12.
A. Walker & Son. . . . .	Paper boxes. . . . .	4	28	5	..	14.
Haworth & Dewhurst. . . . .	Packing coffee. . . . .	33	7	..	..	14.
S. Kaufman & Son. . . . .	Pants. . . . .	25	125	..	..	14.
Sampliner & Rich. . . . .	Cloaks. . . . .	15	60	..	..	14.
J. Klee & Talk. . . . .	Pants. . . . .	12	23	..	..	14.
Jas. Klees' Sons & Co.. . . . .	.. . . .	5	30	..	..	14.
Steam Dye Works. . . . .	General renovating. . . . .	5	3	..	..	15.
Leader Office. . . . .	Newspapers. . . . .	75	5	1	..	15.
Reyner Bros.. . . . .	Confectionery. . . . .	44	31	..	..	15.
W. T. Brown & Bro.. . . . .	Roasting. . . . .	6	3	..	..	15.
Jas. McClurg & Co.. . . . .	Confectionery. . . . .	50	10	2	..	15.
Pittsburgh Label Company. . . . .	Label printing. . . . .	48	3	..	..	21.
Fleming Bros.. . . . .	Medicines. . . . .	14	11	1	..	21.
W. G. Johnston. . . . .	Printing and binding. . . . .	63	32	7	..	21.
Lee, Hostetter & Co.. . . . .	Printing. . . . .	18	40	3	..	21.
Geo. A. Kelley & Co. . . . .	Drugs, paints, oils, etc.. . . . .	35	4	5	..	22.
W. M. Laird. . . . .	Shoe store. . . . .	13	7	1	..	22.
Helntz Bros.. . . . .	Pickling. . . . .	53	22	..	..	22.
Free Bros.. . . . .	Cigars. . . . .	20	10	..	..	22.
H. J. Lynch. . . . .	Dry goods. . . . .	14	11	..	..	22.
Hugus & Hackle. . . . .	Merchandise. . . . .	46	4	6	..	22.

## STATISTICS OF FACTORIES—PITTSBURGH—Continued.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured.	NUMBER EMPLOYED.				Sanitary condition.	Date of inspection.	Orders given.	Compliance.
		Males.	Females.	Under 12.	12 to 16.				
Mrs. B. Himmelfrich, . . . . .	Shoe store, . . . . .	17	8	..	..	Good,	April 22.		
Rosenbaum Company, . . . . .	Dry goods store, . . . . .	30	90	..	..	"	22.		
Ginniff & Steinert, . . . . .	Sewing carpet, . . . . .	7	5	..	..	"	23.		
Mrs. C. Weiner, . . . . .	Dry goods and millinery, . . . . .	12	18	..	..	"	23.		
Lewis Weiderhold, . . . . .	Upholstery, . . . . .	5	3	..	1	"	23.		
Bradley, . . . . .	Tailoring, . . . . .	5	2	..	1	"	24.		
V. Pascuzi, . . . . .	" . . . . .	2	10	..	1	"	24.		
C. A. Simpson & Co., . . . . .	Millinery, . . . . .	3	9	..	..	"	25.		
H. E. Walker, . . . . .	Dressmaking, . . . . .	..	8	..	..	"	25.		
Will Price, . . . . .	Shirts, . . . . .	..	14	..	..	"	25.		
Boisel & Wagley, . . . . .	Women and childrens' garments, . . . . .	1	40	..	..	"	25.		
S. Solovan, . . . . .	Suspenders, . . . . .	8	4	..	2	"	25.		
Miss Gardner, . . . . .	Dressmaking, . . . . .	..	8	..	..	"	26.		
Fleishman & Co., . . . . .	Merchandise, . . . . .	25	75	..	19	"	26.		
Mrs. McKnight, . . . . .	Dressmaking, . . . . .	..	7	..	..	"	28.		
S. Doak, . . . . .	" . . . . .	..	7	..	..	"	28.		
Collins Cigar Company, . . . . .	Cigars, . . . . .	27	198	..	77	"	28.		
Dremen, . . . . .	Dressmaking, . . . . .	..	6	..	..	"	28.		
Wm. Grabonskey, . . . . .	Hats, . . . . .	8	10	..	2	"	28.		

[illegible]

## STATISTICS OF FACTORIES—PITTSBURGH—Continued.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured.	NUMBER EMPLOYED.				Sanitary condition.	Date of inspection.	Orders given.	Compliance.
		Males.	Females.	Under 12.	12 to 16.				
C. J. Steln, . . . . .	Cigars, . . . . .	18	12	..	3	Poor,	May 12.	Insufficient number of water closets, . . . . .	Complied.
M. Wagon, . . . . .	Cigars, . . . . .	9	9	..	..	..	12.	..	"
C. L. Flaccus, . . . . .	Bottles, . . . . .	275	..	18	40	Good.	June 7.	Dismiss eighteen children under 12. . . . .	"
Pittsburgh Paper Box Factory, . . . . .	Paper boxes, . . . . .	2	10	..	1	..	11.	..	"
Oppenheimer & Co., . . . . .	Pants, . . . . .	..	31	..	..	..	11.	..	"
James Dickson, . . . . .	Tailoring, . . . . .	7	13	..	1	Fair,	12.	Water closets to be cleaned, . . . . .	Complied.
A. Weinberg, . . . . .	Pants, . . . . .	..	9	..	1	Good,	12.	..	"
Horne & Ward, . . . . .	Fancy goods, . . . . .	50	60	..	14	..	20.	Comply with sections 2 and 3, . . . . .	Complied.
Guskeys, . . . . .	Men's clothing, . . . . .	210	5	..	13	..	20.	..	"
A. G. Campbell & Sons, . . . . .	Furnishing goods, . . . . .	10	25	..	1	..	20.	Comply with section 2, . . . . .	"
Rosenbaum & Co., . . . . .	Trimmings and notions, . . . . .	122	108	..	3	..	20.	..	"
Fleishman & Co., . . . . .	Department store, . . . . .	25	75	..	23	..	20.	..	"
R. & W. Jenkinson, . . . . .	Cigars, . . . . .	30	70	..	..	..	25.	..	"
W. N. Matchneus, . . . . .	Wood boxes, . . . . .	17	15	..	4	..	25.	Comply with sections 2 and 3, . . . . .	Complied.
D. J. Rex & Co., . . . . .	Paper boxes, . . . . .	16	34	..	7	..	26.	..	"
B. F. Veach, . . . . .	Flour sacks, . . . . .	10	15	..	..	..	26.	..	"
Dillworth Bros., . . . . .	Groceries, . . . . .	38	40	..	..	..	26.	..	"
Kaufman Bros., . . . . .	Clothing, . . . . .	180	20	..	20	..	27.	..	"
Monongahela House Company, . . . . .	Laundry, . . . . .	3	15	..	..	..	27.	..	"
Bovard, Rose & Co., . . . . .	Carpet store, . . . . .	53	10	..	..	..	28.	..	"



Knable & Shuster.	Dry goods.	21	15	8	..	30.	Complied.
Oliver McClintock & Co.	Carpets, etc.	100	25	3	..	30.	Comply with sections 2 and 3.
Collins & Wright.	Britannia.	19	11	1	..	July 1.	Complied.
Hostetter & Co.	Printing.	15	45	..	..	1.	Complied.
H. J. Helntz & Co.	Pickling and preserves.	71	126	13	..	1.	Complied.
Helntz Bro. & Co.	Pickling.	14	15	..	..	1.	Complied.
W. G. Johnston.	Printing and binding.	70	30	6	..	2.	Complied.
Collins Cigar Company.	Cigars.	219	209	101	..	2.	Comply with sections 2 and 3.
John A. Irwin.	Book bindery.	9	12	1	..	2.	Complied.
Stevenson & Foster.	Printing.	45	15	3	..	2.	Complied.
Kaufman's Sons.	Pantaloon.	10	100	..	..	2.	Complied.
Campbell & Dick.	Dry goods, etc.	33	64	3	..	3.	Complied.
Dantzing & Co.	Millinery and fancy goods.	25	105	11	..	3.	Complied.
Jos. Eichbaum & Co.	Printing and binding.	53	30	3	..	3.	Complied.
Sampliner & Rich.	Cloaks.	17	33	..	..	5.	Complied.
Klee & Talk.	Pants.	6	50	..	..	5.	Complied.
E. Gittens.	Book bindery.	4	8	..	..	7.	Complied.
Jos. Horne & Co.	Mercantile.	150	200	78	..	7.	Complied.
A. J. Logan & Co.	Bedding and mattresses.	22	12	..	..	7.	Complied.
W. P. Bennett.	Book bindery.	20	20	1	..	8.	Complied.
Star Encaustic Company.	Flooring tile.	24	23	2	..	9.	Complied.
East End Steam Laundry.	Laundry.	10	33	..	..	9.	Complied.
Simon Mozeskey.	Cigars and tobles.	22	8	1	..	9.	Complied.
Pittsburgh Steam Laundry.	Laundry.	10	20	..	..	9.	Complied.
C. J. Stein.	Tobles.	14	10	1	..	9.	Complied.
Electric Laundry.	Laundry.	10	50	..	..	10.	Complied.
Barnes Bros.	..	30	50	4	..	10.	Complied.
National Book Bindery.	Book binding.	8	10	..	..	11.	Complied.
Arbuckles.	Groceries.	60	30	..	..	11.	Complied.

## STATISTICS OF FACTORIES—PITTSBURGH—Continued.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured.	NUMBER EMPLOYED.			Sanitary condition.	Date of inspection.	Orders given.	Compliance.
		Males.	Females.	Under 12. 12 to 16.				
J. D. Chantler & Co., . . . . .	Shoe uppers, . . . . .	15	60	2	Good.	July 11.		
Matchett Paper Box Factory, . . . .	Paper boxes, . . . . .	5	35	7	"	11.		
Mrs. C. Weisser, . . . . .	Dry goods, notions and millinery, . . . . .	17	18	"	"	14.		
Reymer Bros., . . . . .	Confectionery, . . . . .	69	31	2	"	14.	Comply with sections 2 and 3, . . . . .	Complied.
Geo. F. McDonald, . . . . .	" . . . . .	5	25	"	"	14.		
Roenigh Bros., . . . . .	Upholstery, . . . . .	2	7	1	"	14.		
Biber & Easton, . . . . .	Dry goods, . . . . .	35	15	2	"	14.		
H. J. Lynch, . . . . .	" . . . . .	14	9	"	"	14.		
Will Price, . . . . .	Shirts, . . . . .	"	14	"	"	15.		
E. Groetzinger, . . . . .	Carpet store, . . . . .	37	18	2	"	15.		
Jas. McClung & Co., . . . . .	Confectionery, . . . . .	17	11	3	"	31.	Post notices; hand rail on stairs; erect fire escapes.	Complied.
John Dunlap & Co., . . . . .	Tinware, . . . . .	32	37	"	"	31.		
Jos. Kless' Sons & Co., . . . . .	Pantaloon, . . . . .	10	65	"	"	31.		
Pennsylvania Cotton Mill, . . . . .	Cotton goods, . . . . .	55	225	36	"	Aug. 2.	Keep record book, . . . . .	Complied.
Mrs. Joyce, . . . . .	Millinery and dry goods, . . . . .	"	15	"	"	6.		
J. Bennett & Son, . . . . .	Pants, . . . . .	2	16	"	"	6.		
M. Oppenheimer, . . . . .	" . . . . .	"	33	"	"	6.		
American Tea Company, . . . . .	Tea and chinaware, . . . . .	35	15	"	"	Sept. 2.		
M. Wagnan, . . . . .	Cigars, . . . . .	8	12	1	Fair.	2.		

J. H. Kunkel & Bros., . . . . .	Dry goods and notions, . . . . .	3	10	..	2	Good.	3.	Comply with sections 2 and 3.	Complied.
Pittsburgh Paper Box Company, . .	Paper boxes, . . . . .	1	10	..	2	..	4.	Comply with section 2.	..
Western Union Telegraph Co., . .	Telegraphy, . . . . .	139	20	..	40	..	Oct.	Comply with sections 2 and 3.	..
Jos. Horne & Co., . . . . .	Dry goods, . . . . .	118	7	..	4	..	3.	..	..
Harry Mozuskey, . . . . .	Tobies, . . . . .	11	6	..	4	Fair,	9.	Comply with sections 2, 3 and 10.	..
J. Bennett & Son, . . . . .	Pants, . . . . .	2	18	..	..	Good.	9.	..	..
American Tea Company, . . . . .	Wholesale and retail house, . .	38	12	..	..	..	9.	..	..
S. S. Marvin, . . . . .	Crackers and bread, . . . . .	125	225	..	50	..	20.	..	..
B. Himmlich & Sons, . . . . .	Shoe store, . . . . .	20	13	1	4	..	24.	Comply with sections 2 and 3.	Complied.
E. S. Giles, . . . . .	Millinery, . . . . .	3	11	..	2	..	24.	..	..
Boston Novelty Store, . . . . .	Notions, etc., . . . . .	3	11	..	4	..	27.	..	..
Babar & Wriand, . . . . .	Corks, . . . . .	5	12	..	2	..	27.	Comply with sections 2 and 3.	Complied.
Owen & Co., . . . . .	Cigars, . . . . .	9	20	..	1	Fair,	Mar. 14.	Water closets ordered.	..
Pearl Laundry Co., . . . . .	Laundry, . . . . .	5	30	..	1	Good.	19.	Comply with sections 2 and 3.	..
Convent Steam Laundry, . . . . .	.. . . . .	..	24	..	1	..	28.	Comply with sections 2 and 3.	Complied.

ALLEGHENY CITY, PA.

F. M. Latimer, . . . . .	Merchandise, . . . . .	28	32	..	4	Good,	May 13.	Comply with section 3.	
Douglass & Mackie, . . . . .	Merchandise and dressmaking	15	24	..	2	..	13.		
Boggs & Buhl, . . . . .	Dry goods store, . . . . .	150	100	..	30	..	13.		
Thomas Kenyon, . . . . .	Merchandise, . . . . .	9	13	..	8	..	13.		
Thompson Bro., . . . . .	Ladies' and gent's furnishing goods,	6	16	..	3	..	14.		
E. J. Linnekin & Co., . . . . .	Hat bleachery, . . . . .	10	35	1	7	..	14.		
E. S. Giles, . . . . .	Millinery, . . . . .	2	23	..	1	..	15.		
Pusey & Kerr, . . . . .	Wall paper and carpets, . . .	24	10	..	1	..	14.		
Wentz & Co., . . . . .	Cigars, . . . . .	5	105	..	26	..	15.		

## STATISTICS OF FACTORIES—ALLEGHENY CITY—Continued.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured.	NUMBER EMPLOYED.			Sanitary condition.	Date of inspection.	Orders given.	Compliance.
		Males.	Females.	Under 12. 12 to 16.				
M. Brilles & Co., . . . . .	Cigars, . . . . .	7	76	..	9	May 15.		
J. Wrigley, . . . . .	Paper boxes, . . . . .	4	23	..	4	15.	One wheel and belt to guard, . . . . .	Complied.
E. Meginn, . . . . .	Bakery and confectionery, . . . . .	25	25	..	..	15.	Floor opening to be guarded, . . . . .	..
Pennsylvania Cotton Mills, . . . . .	Cotton, . . . . .	80	200	..	51	16.		
J. Collins, . . . . .	Cigars, . . . . .	5	20	..	5	16.	Insufficient number of water closets, . . . . .	Complied.
Hope Biscuit Works, . . . . .	Bakery, . . . . .	15	9	..	4	17.		
Torpedo Co., . . . . .	Fog signals for railroads, . . . . .	3	13	..	5	19.		
Keystone Biscuit Works, . . . . .	Bakery, . . . . .	46	24	..	1	19.		
W. C. Puring & Co., . . . . .	Potato chips, . . . . .	2	7	..	..	20.	Water closets to be cleansed, . . . . .	Complied.
Cruikshanks Preserving Company, . . . . .	Preserves and jellies, . . . . .	19	9	..	8	20.	..	..
Lemon, Hamilton, Arnold & Co., . . . . .	Coffins, . . . . .	165	35	1	3	21.	One belt and fire-proof stairs to be guarded, . . . . .	..
Pittsburgh Clay Pot Company, . . . . .	Glass house pots, . . . . .	109	11	..	..	21.		
Keystone Laundry, . . . . .	Laundry, . . . . .	8	30	..	5	22.		
Allegheny Steam Dye Work, . . . . .	Dyeing and scouring, . . . . .	20	60	..	..	22.		
McKinney Manufacturing Company, . . . . .	Hardware, . . . . .	200	50	..	115	22.		
Central Steam Laundry, . . . . .	Dyeing and scouring, . . . . .	2	9	..	..	23.	Water closets to be screened, . . . . .	Complied.
Conroy, Prugh & Co., . . . . .	Bevelling and silvering plate glass, . . . . .	18	36	..	8	24.		
Rankin & Holdship, . . . . .	Tin cans and boxes, . . . . .	15	25	..	..	25.		
H. J. Helintz & Co., . . . . .	Pickling, . . . . .	125	75	..	29	26.		
Lutz Bros., . . . . .	.. . . .	25	35	..	6	26.	Hand rails on stairway, . . . . .	Complied.



James McClurg & Co., . . . . .	Bakery, . . . . .	19	19	2	Fair.	25.	Water closets to be cleansed; steps to be repaired.	..
Western Leather Company. . . . .	Shoe soles, . . . . .	3	35	4	..	25.	Water closets to be cleansed; railings on stairway.	..
Home Steam Laundry, . . . . .	Laundry, . . . . .	7	13	2	Good.	27.		
W. H. Mohrman, . . . . .	Pickling, . . . . .	5	10	..	..	27.		
Baker Chain Company, . . . . .	Chains and wagon hardware.	349	1	..	..	27.		
Union American Cigar Company, .	Cigars, . . . . .	10	245	87	..	27.		
John M. Dongan, . . . . .	.. . . .	3	11	..	Poor.	June 3.	Insufficient number of water closets, . . . . .	Complied.
Globe Company, . . . . .	.. . . .	12	5	6	Good.	3.		
Lutz Bros., . . . . .	Preserves and jellies, . . . . .	5	7	1	..	4.		
Pittsburgh Brass Company, . . . .	Brass goods, . . . . .	150	..	14	..	9.		
Wentz, Stewart & Anderson, . . . .	Cigars, . . . . .	10	90	20	..	19.	Comply with sections 2 and 3, . . . . .	Complied.
Hope Biscuit Works, . . . . .	Crackers and cakes, . . . . .	16	10	2	..	July 10.		
W. C. Pressing & Co., . . . . .	Pretzels, . . . . .	4	17	6	..	10.	Guard elevators, . . . . .	Complied.
H. J. Helntz & Co., . . . . .	Pickling and preserving, . . . . .	87	38	14	..	16.		
Lutz Bros., . . . . .	Pickling, . . . . .	20	20	..	..	16.	Fire escape; hand rails on stairs, . . . . .	Complied.
Home Steam Laundry, . . . . .	Laundry, . . . . .	4	14	..	..	16.	Hand rails on stairs, . . . . .	..
Western Leather Company, . . . . .	Shoe soles, . . . . .	5	52	5	Fair.	16.		
J. Wrigley, . . . . .	Paper boxes, . . . . .	3	22	5	Good.	17.		
W. H. Mohrman, . . . . .	Pickling, . . . . .	8	9	..	..	18.		
Cruikshanks Preserving Company, .	Preserving, . . . . .	17	11	..	..	18.	Hand rails on stairs, . . . . .	Complied.
Thomas Hurd & Co., . . . . .	Bakery, . . . . .	17	23	1	..	18.		
Central Steam Laundry, . . . . .	Laundry, . . . . .	1	8	..	..	18.		
Torpedo Company, . . . . .	Railroad fog signals, . . . . .	2	8	4	..	19.		
Douglas & Mackie, . . . . .	Dry goods and notions, . . . . .	12	26	9	..	21.	Comply with sections 2 and 3, . . . . .	Complied.
Boggs & Buhl, . . . . .	.. . . .	150	100	35	..	21.	..	..
E. Meginn, . . . . .	Baker and confectioner, . . . . .	50	50	..	..	21.	Floor openings to be protected, . . . . .	..
Thompson Bros., . . . . .	Millinery and notions, . . . . .	5	15	1	..	21.	Post notices, . . . . .	..
E. S. Giles, . . . . .	Millinery, . . . . .	1	11	1	..	21.	Comply with sections 2 and 3, . . . . .	..

## STATISTICS OF FACTORIES—ALLEGHENY CITY—Continued.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured.	NUMBER EMPLOYED.			Sanitary condition.	Date of inspection.	Orders given.	Compliance.
		Males.	Females.	Under 12. 12 to 16.				
W. H. Walker, . . . . .	Soap and candles, . . . . .	80	30	8	Fair.	July 22.	Floor openings to be protected; water closets to be cleaned.	Complied.
Brilles & Co., . . . . .	Cigars, . . . . .	12	88	14	Good.	22.		
Rankin & Holdship, . . . . .	Tinware, . . . . .	20	25	..	..	22.		
Chas. Pfeifer, . . . . .	Laundrying and dyeing, . . . . .	15	45	1	..	22.	Comply with sections 2 and 3.	Complied.
Keystone Laundry, . . . . .	Laundry, . . . . .	7	28	..	..	22.		
Pittsburgh Clay Pot Company, . . . . .	Glass melting pots, . . . . .	91	9	..	..	23.		
Lemon, Hamilton, Arnold & Co., . . . . .	Coffins and caskets, . . . . .	175	50	10	..	23.	Floor openings to be protected,	Complied.
James McClurg & Co., . . . . .	Crackers, . . . . .	18	17	2	..	23.	..	..
James Collins, . . . . .	Cigars, . . . . .	6	14	1	..	24.		
Union American Cigar Company, . . . . .	.. . . .	16	203	81	..	Aug. 1.		
Pittsburgh Brass Company, . . . . .	Brass works, . . . . .	160	..	19	..	2.	Post notices and rail stairway.	Complied.
J. O. Shimmel & Co., . . . . .	Preserving, . . . . .	27	15	4	..	4.		
Conroy, Prugh & Co., . . . . .	Beveling glass, etc., . . . . .	18	37	10	..	Sept. 4.	Comply with sections 2 and 3.	Complied.
Lutz Bros., . . . . .	Preserves and jellies, . . . . .	9	9	..	..	18.		
W. C. Pressing & Co., . . . . .	Pretzels, . . . . .	4	13	5	..	17.		
Hope Biscuit Works, . . . . .	Crackers, . . . . .	17	10	3	..	17.		
McKinney Manufacturing Company	Hinges, . . . . .	360	40	80	..	24.		
Baker Chain Company, . . . . .	Chains and light forging, . . . . .	300	..	55	..	24.	Post notices.	Complied.
Shimmel & Co., . . . . .	Preserving and pickling, . . . . .	39	26	5	..	30.		

Linnekins, . . . . .	Hat bleaching, . . . . .	4	40	. . . . .	..	Oct. 1,	Comply with section 3. . . . .	Complied.
John M. Dangan, . . . . .	Cigars, . . . . .	3	14	. . . . .	..	Nov. 25.		
Torpedo Company, . . . . .	Railroad fog signals, . . . . .	3	16	. . . . .	..	26.		

ETNA, ALLEGHENY COUNTY.

Spang, Chalfant & Co., . . . . .	Rolling mill and pipe works, . .	825	. . . . .	91	Good,	June 5.		
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CREIGHTON, ALLEGHENY COUNTY.

Pittsburgh Plate Glass Company, .	Plate glass, . . . . .	470	30	. . . . .	12	Good,	June 6.	
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TARENTUM, ALLEGHENY COUNTY.

Pittsburgh Plate Glass Company, .	Plate glass, . . . . .	589	11	. . . . .	25	Good,	June 6.	
Godfrey & Clark, . . . . .	Paper sacks, . . . . .	10	32	. . . . .	5	Fair,	7.	Complied.
Challmor, Taylor & Co., . . . . .	Table glassware, . . . . .	210	140	. . . . .	72	Good.	7.	Complied.

McKEE'S ROCKS, ALLEGHENY COUNTY.

Iron City Bridge Works, . . . . .	Bridges and buildings, . . . . .	219	. . . . .	17	Good,	June 10.		
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STATISTICS OF FACTORIES—VERONA, ALLEGHENY COUNTY.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured.	NUMBER EMPLOYED.				Sanitary condition.	Date of inspection.	Orders given.	Compliance.
		Males.	Females.	Under 12.	12 to 16.				
Verona Tool Works. . . . .	Railroad track tools. . . . .	73	. . . .	. .	12	Good.	June 18.		

HULTON, ALLEGHENY COUNTY.

Agnew & Co., . . . . .	Prescription glass, . . . . .	130	. . . .	5	20	Good.	June 18.	Comply with section 2, . . . . .	Complied.
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TARENTUM, ALLEGHENY COUNTY.

Richards & Hartley, . . . . .	Table glassware, . . . . .	131	19	. .	28	Good.	June 19.		
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NATRONA, ALLEGHENY COUNTY.

Pennsylvania Salt Manufacturing Company.	Chemicals, . . . . .	750	. . . .	2	51	Good.	June 19.	Comply with section 2, . . . . .	Complied.
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TARENTUM, ALLEGHENY COUNTY.

Pittsburgh Plate Glass Company.	Plate glass, . . . . .	688	12	..	1	Good.	Sept. 15.	Post notices and place certificates on file. . . .	Complied.
Godfrey & Clark, . . . . .	Paper sacks, . . . . .	64	36	..	10	..	15.	Post notices and place certificates on file. . . .	Complied.
C. L. Placeus, . . . . .	Flint bottle works, . . . . .	288	..	..	..	..	15.		
Challinor, Taylor & Co., . . . . .	Table glassware, . . . . .	125	135	..	102	..	16.		
Richards & Hartley, . . . . .	..	149	21	..	24	..	15.		

NATRONA, ALLEGHENY COUNTY.

Pennsylvania Salt Manufacturing Company.	Chemicals, . . . . .	800	..	..	..	51	Good.	Sept. 16.	
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CREIGHTON, ALLEGHENY COUNTY.

Pittsburgh Plate Glass Company, .	Plate glass, . . . . .	537	13	..	25	Good.	Sept. 15,	Keep record book. . . . .	Complied.
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HULTON, ALLEGHENY COUNTY.

Agnew & Co., . . . . .	Glass bottles, . . . . .	70	..	..	..	40	Good.	Sept. 26.	
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VERONA, ALLEGHENY COUNTY.

Verona Tool Works, . . . . .	Steel and mining tools. . . .	79	..	..	..	8	Good.	Sept. 26.	
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STATISTICS OF FACTORIES--BEAVER FALLS, BEAVER COUNTY.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured.	NUMBER EMPLOYED.				Sanitary condition.	Date of inspection.	Orders given.	Compliance.
		Males.	Females.	Under 12.	12 to 16.				
Arctic Tile Company, . . . . .	Tile, . . . . .	30	20	. .	. .	Good.	Mar. 17.		

WILKINSBURG, ALLEGHENY COUNTY.

Park Place Laundry, . . . . .	Laundry work, . . . . .	15	60	. .	6	Good,	May 6,		
Park Place Laundry, . . . . .	" . . . . .	27	70	. .	8	"	Oct. 4,		

SHARPSVILLE, PITTSBURGH.

Acme Steam Laundry, . . . . .	Laundry, . . . . .	6	9	. . .	. .	Good,	May 12.		
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SHARPSBURG, ALLEGHENY COUNTY.

H. J. Heintz & Co., . . . . .	Horse radish, milk, pickling,	66	30	. .	3	Fair,	June 5,		
Architectural Glass Company, . . .	Lamps, tile, etc., . . . . .	51	5	. .	14	Good,	Oct. 28,	Comply with sections 2 and 3.	

FREEPORT ROAD, ALLEGHENY COUNTY.

Tibby Bros.. . . . .	Prescription flint glass. . . .	250	. . . .	3	105	Good,	June 5, Sept. 18.	Dismiss three children under 12. . . . .	Complied.
Tibby Bros.. . . . .	.. .. .	110	. . . . .	. . . .	50	..			

JEANNETTE, WESTMORELAND COUNTY.

McKee & Bro.. . . . .	Glass, . . . . .	450	50	. . . .	200	Good,	Mar. 14.		
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NEW BRIGHTON, BEAVER COUNTY.

Standard Horse Nail Company. . .	Horse shoe nails. . . . .	71	24	. . .	1	Good,	Mar. 17.		
Pioneer Twine Mill. . . . .	Flax, hemp, twine and yarn,	85	70	. . .	50	..	17.		

NEW CASTLE, LAWRENCE COUNTY.

Sprittmater Bros.. . . . .	Merchandise. . . . .	10	12	. . .	. . .	Good,	Mar. 18.		
Brown & Hamilton. . . . .	Dry goods. . . . .	8	9	. . .	1	..	18.		
J. N. Ewer's Sons. . . . .	Merchandise. . . . .	10	8	. . .	. . .	..	18.		
Libby's Steam Laundry. . . . .	Laundry, . . . . .	4	13	. . .	1	..	June 14.		
Dillworth Paper Company . . . . .	Glazed paper. . . . .	18	9	. . .	. . .	..	14.		
New Castle Wire Nail Company. . .	Wire nails, . . . . .	305	20	. . .	. . .	..	14.		

## STATISTICS OF FACTORIES—GREENSBURG, WESTMORELAND COUNTY.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured.	NUMBER EMPLOYED.				Sanitary condition.	Date of inspection.	Orders given.	Compliance.	
		Males.	Females.	Under 12.						12 to 16.
Keck & Co. . . . .	Merchandise. . . . .	16	2	.	.	Good.	Mar. 14.			

## STATISTICS OF FACTORIES—PITTSBURGH, ALLEGHENY COUNTY.

Mr. M. N. BAKER, *Deputy for District No. 3.*

Foundry and machine shop.	388	.....	.....	3	Good,	Mar. 20.	Complied.
Foundry. . . . .	100	.....	.....	12	..	21.	
Forging in iron and steel, . .	60	.....	.....	..	..	21.	
Turning heavy rolls for rolling mill.	4	.....	.....	..	..	21.	
Iron and steel. . . . .	450	.....	.....	16	..	21.	
Electrical machines and instruments.	1,145	15	..	37	..	20.	
Crucibles, . . . . .	25	.....	.....	2	.....	24.	
Carriages, . . . . .	14	.....	.....	..	.....	24.	
Steel, . . . . .	600	.....	.....	13	.....	24.	
Oil well supplies and tools, .	30	.....	.....	..	.....	24.	
Stoves and job work, . . . . .	34	.....	.....	..	.....	24.	
Oil well supplies and tools. .	25	.....	.....	..	.....	24.	
Heavy machinery. . . . .	100	.....	.....	..	Good,	25.	





## STATISTICS OF FACTORIES—PITTSBURGH, ALLEGHENY COUNTY—Continued.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured.	NUMBER EMPLOYED.			Sanitary condition.	Date of inspection.	Orders given.	Compliance.
		Males.	Females.	Under 12. 12 to 16.				
Swain & Angel. . . . .	Machines and engines, . . . . .	7	..	..	..	April 12.		
Keystone Axle Works, . . . . .	Iron wagon axles, . . . . .	15	..	..	..	12.		
Foundry Carbon Company, . . . . .	Carbons for electric lights, . . . . .	29	..	2	Good.	12.		
O'Hara Glass Company, . . . . .	Glassware, . . . . .	170	10	27	..	12.		
Black Diamond Steel Works, . . . . .	Steel and copper, . . . . .	1,900	..	70	..	12.		
Carbon Iron Works, . . . . .	Iron and steel, . . . . .	375	..	5	..	12.		
McElroy & Co., . . . . .	Brooms and paper, . . . . .	26	9	6	..	16.		
Pittsburgh Malleable Iron Works, . . . . .	Malleable iron castings, . . . . .	50	..	5	..	17.		
Keystone Smelting Company, . . . . .	Brass and bronze, . . . . .	7	..	1	..	17.		
Reliance Steel Casting Company, . . . . .	Steel castings, . . . . .	25	..	1	..	18.		
S. B. Rheam & Co., . . . . .	Boiler shop, . . . . .	50	..	1	..	18.		
McCollough, Dalzell & Co., . . . . .	Crucibles, . . . . .	33	..	..	..	18.		
Pittsburgh Bridge Company, . . . . .	Steel and iron bridges, . . . . .	192	..	10	Good.	18.		
Keystone Bridge Company, . . . . .	Iron and steel, . . . . .	448	..	8	..	20.		
Globe Plow Works, . . . . .	Plows, . . . . .	131	..	..	..	21.		
Weyuan & Bro., . . . . .	Tobacco and snuff, . . . . .	46	34	3	..	21.		
Duquesne Engine Works and Foundry, . . . . .	Machine shop, . . . . .	63	..	..	..	22.		
D. R. Speer & Co., . . . . .	Planing mill and box factory, . . . . .	47	..	4	..	22.		
William Sterrett & Co., . . . . .	Foundry and machine shops, . . . . .	70	..	..	..	22.		

Protect elevators, . . . . . Complied.

Carroll Porter Boiler and Tank Shop,	Boilers and tanks, . . . . .	24	. . . . .	1	. . . . .	22.	
Duquesne Boiler Works, . . . . .	Boilers, . . . . .	60	. . . . .	2	. . . . .	22.	
Kinzer & Jones Manufacturing Co.,	Foundry, . . . . .	57	. . . . .	4	Good,	22.	
A. French & Co., . . . . .	Springs, . . . . .	210	. . . . .	12	"	25.	
Velte & McDonald, . . . . .	Machines and Boilers, . . . . .	30	. . . . .	1	. . . . .	31.	
Slack & Shoes, . . . . .	Planing mill, . . . . .	19	. . . . .		Good,	May 2,	Complied.
Iron City Foundry, . . . . .	Iron castings, . . . . .	180	. . . . .		. . . . .	2.	
Westinghouse Machine Company, .	Engines, . . . . .	430	. . . . .	2	. . . . .	2.	
Woodworth, Evans & Co., . . . . .	Brass foundry, . . . . .	25	. . . . .		. . . . .	3.	
Shiffler Bridge Company, . . . . .	Bridges and buildings, . . . . .	210	. . . . .	14	Good,	April 30,	
S. Strunz Sons, . . . . .	Soap, . . . . .	18	4	3	"	5.	
Lewis' Foundry and Machine Co.,	Machinery and castings, . . . . .	112	. . . . .		"	May 5.	
Pittsburgh Shoe Factory, . . . . .	Shoes, . . . . .	80	20	1	5	5.	Complied.
Adams & Co., . . . . .	Tableware and lamps, . . . . .	193	42	27	"	6.	
Geo. A. Macbeth & Co., . . . . .	Glass chimneys, . . . . .	406	45	53	"	6.	Complied.
McConway & Torley Co., . . . . .	Malleable iron castings, . . . . .	413	10	6	"	13.	
Ihmsen Glass Company, . . . . .	Window glass, fruit jars and bottles, . . . . .	210	5	27	"	13.	
James McKay & Co., . . . . .	Iron chains, . . . . .	70	. . . . .	16	"	14.	Complied.
Bryce Bros., . . . . .	Glass tableware, . . . . .	184	9	24	"	14.	"
H. B. Scott & Co., . . . . .	Barb fence wire, . . . . .	100	125	. . . . .	Bad,	6.	"
Taylor & Dean, . . . . .	Fire escapes and wire screens, . . . . .	65	. . . . .	6	Good,	25.	
Pennsylvania Tube Works, . . . . .	Wrought iron pipes, . . . . .	700	. . . . .	35	"	26.	
Pittsburgh Tube Company, . . . . .	"	373	. . . . .	20	"	26.	
C. G. Hussey & Co., . . . . .	Copper and brass, . . . . .	94	. . . . .	2	13	26.	Complied.
Linden Steel Company, . . . . .	Iron and steel, . . . . .	500	. . . . .	6	"	27.	
Womser Glass Company, . . . . .	Bottles and fruit jars, . . . . .	45	6	25	Bad,	27.	Complied.
Wm. McCully & Co., . . . . .	Glass bottles, . . . . .	67	. . . . .	46	Good,	17.	

## STATISTICS OF FACTORIES—PITTSBURGH, ALLEGHENY COUNTY—Continued.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured.	NUMBER EMPLOYED.				Sanitary condition.	Date of inspection.	Orders given.	Compliance.
		Males.	Females.	Under 12.	12 to 16.				
Wm. McCully & Co., . . . . .	Glass bottles, . . . . .	60	. . . . .	. . . . .	41	Good.	May 17.		
Wm. McCully & Co., . . . . .	" . . . . .	42	. . . . .	. . . . .	33	"	17.		
Solar Iron and Steel Works, . . . . .	Iron and steel, . . . . .	516	. . . . .	. . . . .	34	"	17.		
Keystone Rolling Mill Company. . . . .	Skelp iron. . . . .	350	. . . . .	. . . . .	7	"	26.		
Crescent Steel Company, . . . . .	Steel, . . . . .	532	. . . . .	. . . . .	11	"	April 21.		
McElroy & Co., . . . . .	Broom and rag warehouse, . . . . .	26	9	. . . . .	6	"	June 20.	Comply with sections 2, 3, 7, 9 and 10, . . . . .	Complied.
Upper Union Mill. . . . .	Iron and steel, . . . . .	1,400	. . . . .	. . . . .	55	"	20.		
Soho Iron and Steel Works, . . . . .	" . . . . .	1,100	. . . . .	. . . . .	10	"	Mar. 26.		
Lower Union Mill. . . . .	Iron, . . . . .	1,000	. . . . .	. . . . .	15	"	June 20.		
Pittsburgh Manufacturing Co., . . . . .	Iron castings and bolts, . . . . .	75	. . . . .	. . . . .	19	"	July 8.		
Armstrong Bro. & Co., . . . . .	Corks, . . . . .	391	580	. . . . .	121	"	Aug. 18.		
Soho Copper Works, . . . . .	Copper and brass, . . . . .	94	/	. . . . .	11	"	Sept. 2.		
John Dunlap & Co., . . . . .	Tinware specialties, . . . . .	35	45	. . . . .	. . . . .	"	3.		
J. T. & A. Hamilton, . . . . .	Glass bottles and jars, . . . . .	200	. . . . .	3	70	"	25.	Dismiss three children under 12, . . . . .	Complied.
W. H. Hamilton & Co., . . . . .	Glass bottles, . . . . .	273	. . . . .	. . . . .	97	"	27.		
Wayne Iron and Steel Works, . . . . .	Iron and steel, . . . . .	500	. . . . .	. . . . .	10	"	13.		
Pittsburgh Tube Works, . . . . .	Wrought iron pipes, . . . . .	650	. . . . .	. . . . .	19	"	30.		
McKay & Co., . . . . .	Chains, . . . . .	50	. . . . .	1	16	"	Oct. 11.	Dismiss one child under 12 and guard engine. . . . .	Complied.
Womser Glass Company, . . . . .	Glass bottles, jars, etc., . . . . .	52	2	. . . . .	25	"	Sept. 2.		
O'Hara Glass Company, . . . . .	Glass tableware, . . . . .	285	15	. . . . .	31	"	Oct. 20.	Protect floor openings.	



## PITTSBURG, SOUTHSIDE.

		162	18	20	Good.	May	6.		
Ripley & Co., . . . . .	Chimneys and tableware. . . . .	162	18	20	Good.	May	6.		
Pittsburgh Wire Nail Company. . . . .	Wire nails, . . . . .	144	6	28	Fair.		6.	Floor openings and elevators to be protected and water closets to be repaired.	Complied.
Thos. Evans & Co., . . . . .	Glassware, lamps, etc., . . . . .	439	33	37	Good.		7.		
King Glass Company, . . . . .	Glassware. . . . .	200	20	35	..		8.		
Peerless Lead Glass Works, . . . . .	Glass, chimneys, jars, etc., . . . . .	170	19	13	..		9.	Floor openings and elevators to be guarded.	Complied.
Phillips & Co., . . . . .	Window glass, . . . . .	100	..	3	..		19.		
Chess, Cook & Co., . . . . .	Nails and tacks, . . . . .	380	20	16	Good.		20.		
Cunningham & Co., . . . . .	Green glass bottles, . . . . .	180	..	36	..		21.		
D. O. Cunningham, . . . . .	Glass bottles, . . . . .	125	..	38	..		21.		
Billworth, Porter & Co., . . . . .	Railroad and boat spikes, . . . . .	550	..	15	..		22.		
Oliver & Roberts Wire Company, . . . . .	Plain wire, . . . . .	634	..	5	..		22.		
Hogan, Evans & Co., . . . . .	Glassware, . . . . .	256	8	33	Poor,		21.	Put water closets in good condition, . . . . .	Complied.
Clinton Iron and Steel Company, . . . . .	Finished iron and metal, . . . . .	350	..	6	Good.		22.		
Sligo Rolling Mills, . . . . .	Iron and steel, . . . . .	425	..	10	..		22.		
Point Bridge Glass Company, . . . . .	Bottles and window glass, . . . . .	153	..	4	..		23.		
Pittsburgh Iron Works, . . . . .	Hoop and band iron, . . . . .	1,000	..	8	..	June	3.		
Ger Duncan & Sons, . . . . .	Glass tableware, . . . . .	245	30	55	..	May	6.	Floor openings to be protected: elevator doors to be repaired and water closets to be designated.	Complied.
Jones, Caritt & Co., . . . . .	Glassware, . . . . .	106	14	19	..		19.		
M. Lanz & Sons, . . . . .	Hinges and bolts, . . . . .	24	..	5	..		20.		
Oliver Iron & Steel Company, . . . . .	Bolts, nuts, etc., . . . . .	374	101	49	Fair,		18.	Water closets to be repaired, cleaned and designated.	Complied.
Standard Nut Company, . . . . .	Hot pressed nuts, . . . . .	81	..	8	Good.		18.		
Thomas Wightman & Co., . . . . .	Window glass and bottles, . . . . .	145	..	20	..		17.		
American Iron and Steel Works, . . . . .	Iron and steel, . . . . .	3,205	..	105	..		28.		
Boyle & Co., . . . . .	Glass, . . . . .	106	9	19	..	Oct.	8.		
Jones, Caritt & Co., . . . . .	Glass tableware, . . . . .	98	12	18	..		10.		

## PITTSBURGH, SOUTHSIDE—Continued.

NAME OF FACTORY OR WORKSHOP	Goods manufactured.	NUMBER EMPLOYED.				Sanitary condition.	Date of inspection.	Orders given.	Compliance.
		Males.	Females.	Under 12.	12 to 16.				
Hogan, Evans & Co., . . . . .	Glass, . . . . .	244	6	..	26	Good.	Oct. 10.		
D. O. Cunningham, . . . . .	Glass bottles, . . . . .	133	..	..	39	..	13.		
Bryce Bros., . . . . .	Glass specialties, . . . . .	276	24	2	48	..	13.		
Cunningham & Co., . . . . .	Glass bottles, . . . . .	140	..	..	30	..	13.		
Thos. Evans & Co., . . . . .	Glass chimneys, . . . . .	448	52	..	44	..	15.		
Geo. Duncan's Sons, . . . . .	Glass, . . . . .	260	40	..	56	..	18.		
Scott & Co., . . . . .	Barbed wire, . . . . .	240	110	..	31	..	18.		
King Glass Company, . . . . .	Glass tableware, . . . . .	195	25	..	35	..	21.		
Peerless Lead Glass Works, . . . . .	Chimneys and lantern globes, . . . . .	185	20	..	17	..	21.		
Point Bridge Glass Works, . . . . .	Glass bottles and window glass, . . . . .	31	..	..	..	..	22.		
Eclipse Glass Works, . . . . .	Green glassware, . . . . .	162	..	..	29	..	22.		
Adams Glass Company, . . . . .	Glass tableware, . . . . .	235	45	..	29	..	22.		
Dismiss two children under 12. . . . .									
Complied.									

## ALLEGHENY CITY.

NAME OF FACTORY OR WORKSHOP	Goods manufactured.	NUMBER EMPLOYED.				Sanitary condition.	Date of inspection.	Orders given.	Compliance.
		Males.	Females.	Under 12.	12 to 16.				
Liggett Spring and Axle Company, . . . . .	Vehicle springs and axles, . . . . .	248	..	..	12	Good.	June 9.		
Oliver Iron and Steel Company, . . . . .	Iron and steel, . . . . .	575	..	..	..	..	10.		
Pittsburgh Forge and Iron Co., . . . . .	Iron and drop forging, . . . . .	500	..	..	27	..	10.		
Union Malleable Iron Works, . . . . .	Saddles, hardware and castings, . . . . .	100	..	..	21	..	10.		

Pittsburgh Locomotive Works, . . .	650	. . . . .	10	..	16.	Gates to elevator, . . . . . Protect elevators: comply with sections 2, 3 and 9 Protect elevators, . . . . .	Complied .. ..
McKinney Manufacturing Co., . . . .	235	65	100	..	30.		
Lindsey & McCutcheon, . . . . .	100	. . . . .	35	..	Aug. 13.		
Union American Cigar Company, . . .	15	215	99	..	18.		
Flocker's Rope Works, . . . . .	21	. . . . .	15	..	22.		
Lindsey & McCutcheon, . . . . .	160	. . . . .	13	..	27.	Oct. 14.	
Union Malleable Iron Works, . . . .	97	. . . . .	23	..	14.		
Ligget Spring Axle Company, . . . .	250	. . . . .	16	..	15.		
Locomotives and cars, . . . . .							
Hinges and hardware, . . . . .							
Wrought iron hinges, . . . . .							
Cigars, . . . . .							
Rope, . . . . .							
Rolling mill, . . . . .							
Malleable iron, . . . . .							
Vehicle springs and axles, . . . .							

OIL CITY.

Reid's Machine Shops, . . . . .	19	. . . . .	. . . . .	. . . . .	Feb. 20.		
C. S. Corder & Co., . . . . .	14	. . . . .	. . . . .	. . . . .	20.		
Oil Well Supply Company, . . . . .	150	. . . . .	2	Good,	20.		
Oil City Tube Company, . . . . .	100	. . . . .	20	..	20.		
Oil well supplies, . . . . .							
Spoke works and planing mill, . . . . .							
Oil well supplies, . . . . .							
Wrought iron pipes, . . . . .							

TITUSVILLE.

Smith & Kepler, . . . . .	8	. . . . .	. . . . .	. . . . .	Feb. 18.		
Cyclop's Steel Company, . . . . .	30	. . . . .	. . . . .	. . . . .	19.		
George Stephens & Co., . . . . .	70	. . . . .	4	Good,	19.		
Caspersons' Furniture Company, . .	34	. . . . .	3	. . . . .	19.		
Titusville Iron Company, . . . . .	150	. . . . .	. . . . .	. . . . .	19.		
Young & Lore, . . . . .	20	. . . . .	2	. . . . .	19.		
Titusville Elastic Chair Company, . .	40	. . . . .	. . . . .	. . . . .	19.		
Titusville Furniture Company, . . .	20	. . . . .	. . . . .	. . . . .	20.		
F. C. Joy & Co., . . . . .	52	. . . . .	. . . . .	. . . . .	20.		
Engines, . . . . .							
Steel bars and blooms, . . . . .							
Oil barrels and refinery, . . . . .							
Bedsteads, etc., . . . . .							
Machinery and boilers, . . . . .							
Chairs, . . . . .							
Furniture, . . . . .							
Boilers and radiators, . . . . .							

## STATISTICS OF FACTORIES—NEW BRIGHTON.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured.	NUMBER EMPLOYED.			Sanitary condition.	Date of inspection.	Orders given.	Compliance.
		Males.	Females.	Under 12. 12 to 16.				
New Brighton Glass Works, . . . .	Glassware, . . . . .	138	12	39	Good.	July 12.		
Bentley & Gerwig's, . . . . .	Flax, twine and cord, . . . .	100	50	50	"	12.		
Dithridge Flint Glass Company, . .	Fine cut glassware, . . . . .	175	25	25	"	12.		
New Brighton Pottery Works, . . .	Stoneware, . . . . .	119	6	4	"	12.		
Sherwood Bros., . . . . .	"	109	26	1	"	12.	Dismiss one child under twelve years of age.	Complied.
Standard Horse Nail Company, . .	Horse nails, . . . . .	66	24	1	"	12.		
Kennedy's Keg Factory, . . . . .	Kegs and other cooperage, . .	100	...	34	"	12.	Protect elevators.	Complied.
Bentley & Gerwig's, . . . . .	Flax and twine, . . . . .	74	76	7	"	Oct. 2.	Dismiss seven children under 12.	"
New Brighton Glass Company, . . .	Glass, . . . . .	138	12	13	"	3.	Dismiss two children under 12.	"
Dithridge Glass Company, . . . .	Fine glassware, . . . . .	183	29	30	"	3.	Comply with sections 2 and 3.	"
New Brighton Pottery Company, . .	Stoneware, . . . . .	64	6	8	"	3.	Gate to elevator.	
Kennedy's Keg Factory, . . . . .	Kegs, . . . . .	50	...	1	"	3.	Dismiss one child under 12.	Complied.
Sherwood Bros., . . . . .	Pottery, . . . . .	112	28	30	"	3.		

## FALLSTON, IN NEW BRIGHTON.

M. T. & S. Kennedy, . . . . .	Kegs, . . . . .	50	...	1	20	Good,	Oct. 3.	Dismiss one child under 12.	Complied.
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## BEAVER FALLS.

	125	155	210	43	63	140	225	77	51	96	100	155
Coöperative Flint Glass Company, . . . . .	Flint glass tableware, . . . . .	Files of all kinds, . . . . .	Axes and shovels, . . . . .	Fine tile, . . . . .	Stone chinaware, . . . . .	Glassware and electric light shades, . . . . .	Tools, . . . . .	Stone tableware, . . . . .	Plain and fancy tile, . . . . .	Files, . . . . .	Glass tableware, . . . . .	Glassware, . . . . .
Western File Company, . . . . .	155	15	210	43	63	140	225	77	51	96	100	155
American Ax and Tool Company, . . . . .	210	15	210	43	63	140	225	77	51	96	100	155
Beaver Falls Art Tile Company, . . . . .	43	15	210	43	63	140	225	77	51	96	100	155
Mayer Pottery Company, . . . . .	63	15	210	43	63	140	225	77	51	96	100	155
Valley Glass Company, . . . . .	140	15	210	43	63	140	225	77	51	96	100	155
American Ax and Tool Company, . . . . .	225	15	210	43	63	140	225	77	51	96	100	155
Mayer Pottery Company, . . . . .	77	15	210	43	63	140	225	77	51	96	100	155
Art Tile Company, . . . . .	51	15	210	43	63	140	225	77	51	96	100	155
Western File Company, . . . . .	96	15	210	43	63	140	225	77	51	96	100	155
Coöperative Glass Company, . . . . .	100	15	210	43	63	140	225	77	51	96	100	155
Valley Glass Works, . . . . .	155	15	210	43	63	140	225	77	51	96	100	155
	Good, . . . . .	July 10, . . . . .	Protect elevators, . . . . .	Complied, . . . . .	Protect elevators, . . . . .	Protect elevators, . . . . .	Record book to be kept, . . . . .	Complied, . . . . .	Complied, . . . . .	Complied, . . . . .	Complied, . . . . .	Complied, . . . . .

ROCHESTER.

[illegible]

DUQUENSE, OLIVER STATION, P. V. R. R.

Duquesne Pipe and Tube Works.	Iron pipes and boiler flues.	160	6	Good.	June 27.

## STATISTICS OF FACTORIES—MUNHALL STATION, ALLEGHENY COUNTY.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured.	NUMBER EMPLOYED.			Sanitary condition.	Date of inspection.	Orders given.	Compliance.
		Males.	Females.	Under 12.				
Homestead Steel Works. . . . .	Steel. . . . .	2,500	. . . . .	Under 12. . . . .	Good.	Aug. 14.		
				12 to 16. . . . .				

## COCHRAN STATION, ON P. V. R. R.

Howard Plate Glass Works. . . . .	Plate glass. . . . .	366	14	5	Good.	June 27.	Door to elevator: floor openings to be protected.	Complied.
Allegheny Bessemer Steel Company.	Steel rails. . . . .	700	. . . . .	21	"	26.		

## WEST NEWTON.

Westmoreland Paper Company. . .	Paper. . . . .	99	11	1	Good.	June 26.		
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## McKEESPORT.

M. Dewee's Wood Company. . . . .	Sheet iron. . . . .	650	. . . . .	55	Good.	June 25.		
National Tube Works Company. . .	Iron pipes and tubes. . . . .	5,000	. . . . .	130	"	25.		

BRADDOCK.

Edgar Thomson Steel Works. . . . .	Steel rails, etc. . . . .	2,950	. . . . .	140	Good.	June 24.	
Braddock Glass Company. . . . .	Glass chimneys, . . . . .	200	. . . . .	44	..	24.	
Braddock Wire Company. . . . .	Wire rods, plain and barbed wire.	450	. . . . .	15	..	24.	

FORD CITY, ARMSTRONG COUNTY.

Pittsburgh Plate Glass Company. .	Plate glass. . . . .	696	4 . .	20	Fair.	Aug. 9.	Water closets for females : elevator to be guarded.	Complied.
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WORTHINGTON, ARMSTRONG COUNTY.

Buffalo Woollen Mills. . . . .	Woollen goods, . . . . .	45	25 . .	6	Good.	Aug. 8.	Comply with sections 1, 2, 3, 8, 9 and 10. . . . .	Complied.
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CRAIGSVILLE, ARMSTRONG COUNTY.

Craigsville Woollen Mtl. . . . .	Woollen goods, . . . . .	16	16 . .	3	Good.	Aug. 8.	Comply with sections 1, 2, 3, 8, 9 and 10. . . . .	Complied.
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KITTANNING, ARMSTRONG COUNTY.

Wick China Company. . . . .	Iron stone china. . . . .	55	20 . .	8	Good.	Aug. 8.		
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## STATISTICS OF FACTORIES—ERIE.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured.	NUMBER EMPLOYED.			Sanitary condition.	Date of inspection.	Orders given.	Compliance.
		Males.	Females.	Under 12.	12 to 16.			
Erie City Nickel Plating Works. . .	Nickel plating. . . . .	20	..	..	3	Feb. 24.		
Black and Germer Stove Works. . .	Stoves, ranges, etc., . . . .	140	..	..	8	24.		
T. M. Nagle. . . . .	Engines and boilers. . . . .	302	..	..	..	24.		
F. Bauscheld & Bro. . . . .	Planing mill. . . . .	64	..	..	..	24.		
Lloyd & Sterrett. . . . .	Engines and repairs. . . . .	35	..	..	..	25.		
Lake Shore Rubber Works. . . . .	Belting and hose. . . . .	35	..	..	5	26.		
Lovell Manufacturing Company. . .	Clothes wringers and animal traps. . . . .	70	..	..	35	26.		
Erie City Iron Works. . . . .	Engines and boilers. . . . .	600	..	..	10	26.		
Stearns Manufacturing Company. . .	Boilers and engines. . . . .	304	..	..	4	26.		
Jarecki Manufacturing Company. . .	Brass and iron fittings. . . .	750	..	..	41	26.	Comply with section 2. . . . .	Complied.
Carroll Planing Mill. . . . .	Sash, doors, etc., . . . . .	55	..	..	3	27.		
Erie Machine Shops. . . . .	Repairing engines, etc., . . .	11	..	..	..	27.		
Pennsylvania Manufacturing Co., . .	Brass and iron goods. . . . .	40	..	..	..	27.		
Ball Engine Company. . . . .	Engines. . . . .	75	..	..	..	27.		
Johannsen Manufacturing Co., . .	Furniture. . . . .	25	..	..	..	Mar. 5.		
Hayes Manufacturing Company. . .	Brass goods. . . . .	25	..	..	..	5.		
Keystone Brass Company. . . . .	Brass specialties. . . . .	15	..	..	1	5.		
Brown Machine Company. . . . .	Paper folding. . . . .	25	..	..	..	5.		
Riblet Furniture Factory. . . . .	Furniture. . . . .	35	..	..	2	4.		



Smallery Soap Works.	Soap.	7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023	1024	1025	1026	1027	1028	1029	1030	1031	1032	1033	1034	1035	1036	1037	1038	1039	1040	1041	1042	1043	1044	1045	1046	1047	1048	1049	1050	1051	1052	1053	1054	1055	1056	1057	1058	1059	1060	1061	1062	1063	1064	1065	1066	1067	1068	1069	1070	1071	1072	1073	1074	1075	1076	1077	1078	1079	1080	1081	1082	1083	1084	1085	1086	1087	1088	1089	1090	1091	1092	1093	1094	1095	1096	1097	1098	1099	1100	1101	1102	1103	1104	1105	1106	1107	1108	1109	1110	1111	1112	1113	1114	1115	1116	1117	1118	1119	1120	1121	1122	1123	1124	1125	1126	1127	1128	1129	1130	1131	1132	1133	1134	1135	1136	1137	1138	1139	1140	1141	1142	1143	1144	1145	1146	1147	1148	1149	1150	1151	1152	1153	1154	1155	1156	1157	1158	1159	1160	1161	1162	1163	1164	1165	1166	1167	1168	1169	1170	1171	1172	1173	1174	1175	1176	1177	1178	1179	1180	1181	1182	1183	1184	1185	1186	1187	1188	1189	1190	1191	1192	1193	1194	1195	1196	1197	1198	1199	1200	1201	1202	1203	1204	1205	1206	1207	1208	1209	1210	1211	1212	1213	1214	1215	1216	1217	1218	1219	1220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## STATISTICS OF FACTORIES—ERIE—Continued.

NAME OF FACTORY OR WORKSHOP.	Goods manufactured.	NUMBER EMPLOYED.				Sanitary condition.	Date of inspection.	Orders given.	Compliance.
		Males.	Females.	Under 12.	12 to 16.				
Erie Malleable Iron Company, . . .	Malleable iron castings, . . .	270	..	..	19	Good.	Nov. 11,		
Erie Pail Factory, . . . . .	Pails and tubs, . . . . .	75	..	..	27	..	11.		
Jarecki Manufacturing Company, . .	Iron and brass goods, . . . .	750	..	..	42	..	11.		
Erie Car Works Company, . . . . .	Cars, . . . . .	550	..	..	12	..	12.		
Maner Confectionery Company, . . .	Confectionery, cakes, etc., . .	42	35	..	1	..	12.		
F. F. Adams Co., . . . . .	Novelties, wringers, etc., . . .	85	..	..	15	..	13.	Comply with sections 1, 2 and 3.	
Watson's Paper Mill, . . . . .	Paper, . . . . .	212	13	..	7	..	29.	Belts not to be handled while in motion; gear wheel to be guarded.	Complied.
Cohen's Novelty Store, . . . . .	Novelties, . . . . .	4	20	..	3	Fair.	29.	Comply with sections 1, 2, 3 and 16.	
Boston Store, . . . . .	Sale of dry goods, etc., . . .	23	30	..	9	Good.	29.	Comply with sections 1, 2 and 3.	
Trask, Prescott & Richardson, . . .	Dry goods store, . . . . .	30	30	..	3	..	29.	Comply with sections 2 and 3.	
Penn'a Manufacturing Company, . .	Brass novelties, . . . . .	65	..	..	11	..	29.		
Union Rag Company, . . . . .	Rags (sorting), . . . . .	6	20	..	..	Fair.	29.	Comply with sections 2, 3 and 10.	

# INDEX.

## A. CHANGES IN FARM VALUES.

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